The general history of Africa: studies and documents 11

Libya Antiqua



Unesco

The general history of Africa: studies and documents

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Report and papers of the symposium
organized by Unesco in Paris,
16 to 18 January 1984

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Preface

In 1964 the General Conference of Unesco, as part of the Organization's effort to further the mutual understanding of peoples and nations, authorized the Director-General to take the necessary measures for the preparation and publication of a *General History of Africa.*

Scientific colloquia and symposia on related themes were organized as part of the preparatory work. The papers for discussion and the exchanges of views on a wide variety of subjects at these meetings have provided valuable historical material, which Unesco decided to make known as widely as possible by publishing it in a series entitled 'The General History of Africa: Studies and Documents'.

The present book, the eleventh in this series, contains the papers presented and a report on the discussions that followed at the symposium held at Unesco Headquarters in Paris, from 16 to 18 January 1984, concerning 'Libya Antiqua: a study on the Fezzān and relations between the Mediterranean, the Chad Basin and the Nile Valley between the first and seventh centuries'.

The authors are responsible for the choice and the presentation of the facts contained in this book, and for the opinions expressed therein, which are not necessarily those of Unesco and do not commit the Organization.

The designations employed and the presentation of material throughout the publication do not imply the expression of any opinion whatsoever on the part of Unesco concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Contents

In the presentation of dates the Christian era has been adopted as the international reference, but 'B.C.' and 'A.D.' have been replaced respectively by a minus sign and a plus sign: '2900 B.C.', for example, is rendered as '— 2900', and 'A.D. 1800' as '+1800'. When the references are to centuries the expressions 'before our era' and 'of our era' are used.

Introduction

Unesco has undertaken the task of preparing a *General History of Africa.* The first volumes published have already begun to change long-established methodological approaches to the study of the history of the African continent. By its very nature, scale and scientific character, the *General History of Africa* project will undoubtedly further the African peoples' quest to define and assert their cultural identity. Indeed, it will portray the African view of the world from within and demonstrate the unique character of the values and civilizations of the peoples of the continent as a whole.

The project was launched in 1965. The first five years were devoted to making a critical survey of the documentary sources, culminating in the publication of the series entitled 'Guide to the Sources of the History of Africa', comprising eleven volumes.

The first eight volumes were published by the Inter Documentation Company AG of Zug (Switzerland); Volume 9 was published by KG Saur Verlag KG Tostfach, of Munich, and Volume 10 by the African Studies Association of Waltham, Massachusetts.

The work is being supervised by an International Scientific Committee with thirty-nine members, who represent all the major geocultural areas. The committee decided to divide the *General History of Africa* into eight volumes each of which consists of thirty chapters, covering African history from prehistoric times to the present day. It may be viewed, among other things, as a statement of problems concerning the present state of knowledge and the major trends in research. In addition, it highlights divergencies of doctrine and opinion where these exist. Each volume deals with a particular period and examines the evolution of ideas and civilizations, societies and institutions during that time.

While aiming at the highest possible scientific level, the history does not seek to be exhaustive, but rather a work of synthesis which avoids dogmatism. It applies to African history the methods and techniques of a broad spectrum of disciplines, including linguistics, anthropology, archaeology, oral traditions, history of religions, arts, musicology, sociology, law and the natural sciences.

Four volumes have so far been published: Volume I *(Methodology and*

African Prehistory) in 1980 (French version), 1981 (English version) and 1982 (Spanish and Portuguese versions); Volume II *(Ancient Civilizations of Africa)* in 1980 (French version), 1981 (English version) and 1983 (Spanish and Portuguese versions); Volume IV *(Africa from the Twelfth to the Sixteenth Century)* in 1984 (English version) and 1985 (French version); Volume VII *(Africa under Colonial Domination)* in 1985 (English and French versions); translations into Italian of volumes already published will begin soon. The Arabic version of Volume I was published in 1983 and that of Volume II in 1985; those of Volumes IV and VII are now being prepared for publication. The other volumes will be issued as follows:

Volume III: *Africa from the Seventh to the Eleventh Century* (1985/86)
Volume V: *Africa from the Sixteenth to the Eighteenth Century* (1985/86)
Volume VI: *The Nineteenth Century until the 1880s* (1985/86)
Volume VIII: *Africa from 1935* (1986/87)

Although the volumes are numbered in historical sequence, the order of their publication depends upon the completion by the authors involved.

The entire history is being issued first in English, French and Arabic. Other translations into European or Asian languages are planned, since one of the primary objectives of the *General History of Africa* project is to inform the broadest possible public about the cultures and civilizations of the peoples of Africa. This goal, in turn, is part of Unesco's mandate to encourage and develop communication among the peoples of the world through a better understanding of one another's cultures.

Abridged versions of the *General History of Africa* are now being prepared and will be published in Kiswahili and Hausa, and also in other African languages. An edition in the form of cartoon strips based on the abridged versions is also planned, as well as audio-cassette versions in African languages.

Scientific colloquia and symposia have been organized in order to make available to the authors as much documentary material as possible and to take stock of the most recent research on the subjects to be covered in each volume. The papers prepared for discussion at these meetings are published in English, French and other languages in the series 'The General History of Africa: Studies and Documents'. The following volumes have already been published:

1. *The Peopling of Ancient Egypt and the Deciphering of Meroitic Script.*
2. *The African Slave Trade from the Fifteenth to the Nineteenth Century.*
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The colloquium of which this volume is the outcome was organized by Unesco to provide 'additional scientific information which would contribute to the correction and improvement on the shortcomings in Volume II *(Ancient Civilizations of Africa)* and material for use in Volume III *(Africa from the Seventh to the Eleventh Century')*.

The papers that follow examine the environmental stability or change prior to the Arab conquest; irrigation systems and economic activity; peopling; the axes of communication; prehistoric art, from the Mediterranean to Chad; potential contact between the central valley of the Nile and the River Niger area and the social situation from the end of the Byzantine period up to the eve of the Arab conquest.

Roman agricultural development in Libya and its impact on the Libyan Roman economy before the Arab conquest

A. Laronde

Introduction

During the Roman and Byzantine period, from the first to the seventh century of our era Libya had its own intense agricultural activity, an aspect of its civilization that has escaped the attention of scholars until recent years. Even though European travellers (Pacho, 1828, p. 236) and Arabs (El Hachaichi, 1912, p. 60) noted that there were substantial archaeological remains, the opinions expressed about the agricultural significance of Libya were based on preconceptions that tended either to exaggerate the importance of the country or, on the contrary, to minimize it in the context of the colonial period (de Martino, 1912, p. 145). Moreover, attention was directed to the coastland rather than the vast hinterland.

Thus there is a need to set the record straight. We shall first consider the geographic and demographic situation, exploring the forms of land development and types of agricultural activity with a view to ascertaining the main lines of historical development.

Geography and population

Regional differentiation

First of all it is well to remember that Libya covers an area of some 1.76 million km² and that its Mediterranean seaboard is 1,900 km long. Since it is largely composed of plains, plateaux and valleys, communication is generally easy despite the great distances involved.

What distinguished the coastal zone from the interior is not so much the difference in relief but the difference in rainfall. An average annual rainfall of 200 mm is the minimum required for the dry farming of cereal crops and olive trees, i.e. without recourse to irrigation. In Tripolitania, the 200 mm isohyet takes in the Gefara and the rim of the Djabal, with the exception of a drier sector situated at the foot of the Djabal west of Azīzīyah. In the east of

the country, the 200 mm isohyet includes an area situated north-west of a line running from Quamīnis to Ra's-at Tīn. To the south of that line, deterioration is extremely rapid: at a distance of 80 km below that line, the 25 mm isohyet is reached, that is, the desert zone proper (Fantoli, 1952).

The coastal zone or subtropical Mediterranean zone contains both arable lands and areas unfit for cultivation. This is explained by variations in the depth and continuity of the arables oil layer, whether it be the light soils of Tripolitania or the red earth of al-Djabal al-Akhḍar (Libyan Arab Republic, 1972). Areas where thes oil itself is too thin or discontinuous are covered by the Mediterranean *garrigue*, which is useful to man in providing pasture for flocks.

The interior steppe and sub-desert zone consists of valley bottoms containing a certain amount of moisture, and also of parched plateaux. The former still retain some water which circulates underground, at times at depths of 30 m or more. The only way such potentialities can be taken advantage of is through the installation of hydraulic works. On the plateaux are to be found seasonal forms of herbaceous vegetation providing pasturage for short periods of time.

The desert zone offers a still more striking contrast between the oases and the surrounding *hammada* or *edeyen*.

The pre-Islamic population

Our information is derived from literary sources: Herodotus, Book IV (cf. Chamoux, 1953); Diodorus Siculus, Book III of his *Bibliotheca historica*, which though less well known (cf. Chamoux, 1981), provides a wealth of information on the Libyan tribes and their way of life, and Pliny the Elder, *Historia naturalis*, Book V. For the Byzantine period, Synesius (cf. Roques, 1982) is the principal source. There has been no systematic recording of archaeological data except in the southern part of Tripolitania with the Unesco Libyan Valleys Survey project (Barker and Jones, 1981; Rebuffat, 1982). For Cyrenaica, a large number of individual data are available, from different times and varying in value, which I have briefly reviewed (Laronde, 1983*a*). Special mention should be made of the numerous figurative works, chiefly from the second to the fourth century, such as the mosaics of large buildings on the coast or the reliefs found in the interior, particularly those of Qirzah (Romanelli, 1930, pending publication of Lady Brogan's study on that site).

Pre-Islamic rural settlements are often difficult to date because they do not conform to classical architectural standards, with the result that it is difficult to determine the cultural identity of the inhabitants. Naturally it is possible to distinguish clusters of habitats, villages or hamlets, from scattered habitats. The latter may also have been fortified, at certain periods at least.

The density of the settlements depended first on the possibilities for cultivating the soil in the area; these were naturally high throughout the arable zone of the Mediterranean but became much lower in the steppe and sub-desert zone. Settlements were separated by several kilometres in the valleys like that of the Kebir wādī (Rebuffat, 1982). In the case of the tributaries of the Soffegin wādī, such as the Gobbeen, Mimoun and Lamout wādīs, Barker established a correlation between the amount of available water and human and animal needs, which enabled him to estimate the size of the population and number of livestock (Barker and Jones, 1982).

The density of settlements also depended on the existence of routes of communication, not only the land routes from the interior of Libya but also the Mediterranean sea routes, whose importance for Libya was enhanced by the fact that Libya was part of the Roman and later the Byzantine Empire with the exception of Tripolitania during the period when it was occupied by the Vandals. This explains why the coastal zone of al-Djabal al-Akhḍar, though less well watered than the high plateau, was densely settled, particularly near the ports (Chamoux, 1980).

One should also beware of equating agricultural activity with a settled way of life. Habitats and processing equipment such as wine presses could have been put to seasonal use; conversely, regions having apparently no other vestiges than wells or cisterns could have developed in association with other relatively distant sectors by means of arrangements that were still in existence a few years ago, before Libya embarked upon its present-day programme of rapid modernization (Johnson, 1973, p. 51). This has some influence on our assessment of the comparative importance of the nomadic and sedentary populations.

Forms of development

The first and most widespread type of rural development in Libya involved the collection and conservation of water and moisture in view of the permeability of the soils in the Mediterranean zone and the inadequacy of surface water resources in the interior.

From the beginning of the Roman–Byzantine period, Libya made an exceptional effort to develop its springs and all other water resources by the digging of wells and the building of cisterns. Of particular interest are the waterworks in Cyrenaica (Ahlmann, 1928). They show the stability of climatic conditions that has prevailed since the beginning of the Christian era. Further evidence of such stability is given by the depth of the ancient wells to be seen in the great wādīs in southern Tripolitania. The wells are generally 15–40 m deep, and this proves that the water-bearing strata then

were no higher than they are today. Apart from the wells and cisterns, other techniques were used to collect the runoff: the thorough cleaning of rock surfaces, the development of branches on the valley slopes towards the steppe and subdesert zone, etc.

Dams on the wādīs have also been found in the vicinity of Leptis Magna (Crova, 1967), as well as in southern Tripolitania where very elaborate water systems have come to light such those as in the Lamout wādī (Barker and Jones, 1982, p. 16).

Worthy of special mention are the embankments constructed across the wādīs at almost regular intervals of between 70 and 100 m. These walls, which are built of large irregular blocks and are as a rule no more than 2 m high, are designed to retain the arable soil and conserve a certain amount of moisture in it. We have good examples of these works in the Mimoun wādī, in southern Tripolitania (Barker and Jones, 1982, p. 15) and in Cyrenaica, in the Senab wādī, one of the high valleys in the el Cuf wādī system (Attiyah and Stucchi, 1974, p. 256). I myself have noted comparable systems on the coast near the mouth of the Giargiarummah wādī (Laronde, 1983*b*).

Among the installations for the treatment and conservation of produce from the land, the most characteristic are the remains of presses, a fact that has been recognized for a long time (Manetti, 1918). An installation in al-Baydā', in Cyrenaica, was the subject of a pilot study (Catani, 1976). It is not always easy to differentiate between an olive press and a wine press and it is conceivable that one press was used for both purposes. In any case, the spread of such installations provides a valuable clue to the kinds of crops that were grown in Antiquity. It is more difficult to recognize the specific purpose served by other structures, but we would note that the towers of *pyrgoi* could have been used either for the storage of crops or for defence purposes.

Finally, we come to *the habitat*. Dwellings were either grouped or scattered. *The grouped habitat* comprised, on the one hand, the large villages or *gasr*, which were particularly numerous in the Mediterranean zone (see Fig. 2): the *kômes* in Cyrenaica have yet to be studied (Laronde, 1983*b*). Such villages also existed in the interior, at important points along traffic routes, as for example al-Qaryah al-Gharbia (Barker and Jones, 1981, p. 17). On the other hand, the grouped habitat might comprise only a dozen buildings, often separated by large distances, which had come together spontaneously only because of the availability of water. This was the most common type of grouping, particularly in the steppe and subdesert zone. Defence seems to have been a secondary consideration, particularly in view of the fact that such groupings were situated on the lower slopes of valleys (Barker and Jones, 1981, p. 35).

The scattered habitat consisted mainly of a farm with a courtyard enclosed by a wall, against which the various buildings were constructed. In one instance, in Cyrenaica, these buildings include a central tower of well-bonded stonework;

this could have been either the master's dwelling—possibly a stronghold—or a place for storing crops, or even both. In these complexes it is conceivable that the other buildings were used as sheep-folds or as sheds for equipment.

In cases where the rock configuration was such as to provide shelter, troglodytic forms of habitat also existed. In some instances use was made of former tombs, a fact already recorded by the Ancients, for example by Ptolemy in connection with the Lasaniki tribe in Cyrenaica (Laronde, 1977).

Types of farming

The coastal zone, particularly the port areas, has its own specific features: the presence of water made it possible to raise the most delicate crops by irrigation, like those cultivated in the immediate vicinity of settlements not only in Tripolitania, around Leptis Magna (Romanelli, 1929, p. 540) or Oea, present-day Tripoli, but also in Cyrenaica, around Apollonia (Susah) and, above all, in the area west of the port, from the Hellenistic period onwards, as we know from Plautus' *Rudens*, the play inspired by an Athenian comedy which is set in that very region, and as we also know from the presence of several well-irrigated sites between Haniya and Maaten al-'Uqaylah (Laronde, 1983*b*). Fishing provided additional resources, as did livestock breeding, mainly sheep and goats, on fallow land. Traces of clearly marked property boundary lines on the Cyrenaican coast make it possible to determine relatively accurately the regions where livestock were raised.

Farming throughout the Mediterranean zone was based on the traditional combination of cereal crops, mainly hard wheat and barley, the planting of olive trees and vines, and the breeding of livestock, including sheep and horses. This holds true for the whole of the Gefara and for the eastern extremity of the Tripolitanian Djabal in the region of Tarhūnah (Goodchild, 1951) and Misrātah (Romanelli, 1929, p. 544), also for Cyrenaica, in the fertile crescent sweeping from Benghazi to Darnah. Northern Tripolitania was especially noted for its olive trees, on which the wealth of Leptis Magna was based from the time of Caesar (Gsell, 1924).

Cyrenaica offered two contrasting types of landscape from the beginning of the fourth century before our era, as is known from Aristotle's *History of Animals*, v.30, corroborated by Strabo, xvii.3, 23 and by Pliny the Elder's *Historia naturalis*, v.5: on the one hand, open fields on the high plateau given over to the growing of cereals and livestock breeding; on the other, fields on the intermediate level planted with trees, especially olive trees. This contrast is explained by the fact that the intermediate level was sheltered and protected from the dry winds of the south and, lying at the foothills of the upper level, it enjoyed better irrigation. This created favourable conditions for the cultivation of more

delicate plant species like fruit trees, vines and flowers: the roses of Cyrene were famous and were used to make highly prized perfumes, according to Pliny the Elder's *Historia naturalis*, xxi.10, 19. The high plateau, on the other hand, being drier and more exposed to the wind blowing from the south, the *ghibli*, was the area given over to the extensive cultivation of cereal crops and to livestock breeding. The traces of centuriation that are visible on aerial photographs and can still be seen on the ground owing to the presence of boundary marks or traces of ancient roads help us to reconstruct the landscape and rediscover the large domains of the Hellenistic period, above all the *agri Apionis*, the ancient royal domains of the Ptolemy on which the Roman state, particularly during the reigns of Nero and Vespasian, had to defend its rights against the encroachments of private individuals (Pflaum, 1962). A complementary relationship existed between the open fields of the high plateau and the plantations below: for example the same farmers worked the terraces of vines and olive groves in the Senab wādī and tilled the neighbouring high plateau. The absence or paucity of remains on the fertile land lying south-west of Cyrene also suggests a connection between the farming activities carried out in these fields and the transhumant, pastoral activities that were characteristic of traditional Libya until not so long ago. It follows that this area was not necessarily the preserve of the settled population.

The hinterland was characterized by forms of sedentary life in the wādīs of the steppe and subdesert zone. The development of the floors of valleys made possible the growing of cereals and exceptionally olive trees and even vines. Livestock, mainly goats and sheep, could be bred either in the bottom of valleys after the harvest or on the neighbouring plateaux as long as they had sufficient herbaceous vegetation. Pastoral activity of that kind was complemented by transhumance—southward between November and March, and northward between May and October (Barker and Jones, 1981, p. 35).

Nomadic life as such was, above all, characteristic of the desert zone, as we know from facts that have not varied since Herodotus (iv.172) described the movements of the Nasamonians between the Awjīlah oasis and the shore of the Great Surt. Such pastoral nomadism, which was combined with farming activities in the oases and in the northern areas close to the Mediterranean, was no doubt complemented by gathering activities, like the picking of silphia (cf. the report of Dr Rajab el-Athram), by distinctly commercial activities in the case of the Garamantes (Daniels, 1970, p. 19) and by more aggressive activities such as the razzia carried out at the close of the Hellenistic period, according to Diodorus Siculus, Book iii (Chamoux, 1981) or during the time of the Roman Empire, according to Tacitus, *Historiae*, iv.50.

Economic development

At the beginning of the early Roman Empire, at the dawn of the first century of our era, two important and sharply differentiated forms of rural life existed side by side: on the one hand, an economy based on nomadism, which was practised by the Libyan tribes in both Tripolitania and Cyrenaica; on the other, a rural economy based on large-scale agriculture in the Mediterranean zone. These vast agricultural domains were placed under the administration of publicans who represented the interests of the Roman state, and this was especially the case of the former royal domains of Cyrenaica. Alternatively these domains, whether state or private, were subject to tribute paid to Rome, as was the case for Leptis Magna (Gsell, 1924). The recent establishment of Roman power led to clashes with the nomads that lasted throughout the first century of our era, beginning with the Marmarica wars of the period of Augustus (early first century) and ending with the campaigns of the Flavians. The profits resulting from agriculture promoted the development of the towns, especially those in Tripolitania, which also benefited from important trading activities.

Agricultural life in the Mediterranean zone was slow in developing until the middle of the third century. It may be noted, however, that the rural economy was sound, for in Cyrenaica it was not affected by an event as serious as the Jewish revolt of +115–17. A number of factors contributed to the improvement of rural life during the period: the growing efficiency of the Roman administration, the progress of Romanization and the attendant financial advantages for persons having Roman citizenship, and the development of new land without any proportionate increase in taxation. It is to be noted, however, that during the reign of Septimus Severus, the empire increased its landholdings, especially in Cyrenaica where an *eques* was appointed as procurator (Reynolds, 1971).

Between the end of the first century and the end of the third century a widespread change took place in the hinterland: the development of a settled way of life and a noteworthy effort to develop the land at the bottom of valleys. The region in question covered the Sofeggin, Zem-Zem and Kebir wādīs and their branches, stretching as far west as al-Ḥammāda al-Ḥamrā', up to the outskirts of ash-Shuwayrif and south beyond al-Bu Njem (Rebuffat, 1982). It also extended to the littoral around Tmed Hassan and Surt, and spread south of Cyrenaica and into the al-Djabal al-Akhḍar hinterland between al-Abjār and al-Makili, as well as into the interior of Marmarica to the south of Tobruk. It is to be hoped that an exploration similar to the one made in southern Tripolitania will be carried out in Cyrenaica. The settlements were always on a small scale, and the number of persons living off each production unit was limited: the 50 hectares of land that formed the principal site in the Mimoun wādī

may have provided grain for around 40 people and oil for around 100, according to Barker (Barker and Jones, 1982, p. 20). The fact that the Roman army, at the time of Severus, was established there for half a century and was a large consumer of agricultural produce does not mean that there were sufficient local resources to meet its needs; most food supplies still came in from the coast (Rebuffat, 1977, p. 409). The settling process and concomitant agricultural prosperity in the region were not the effect but the cause of the presence of the Roman army; they continued long after the Romans left, proving that they were indigenous to Libya, and that rural life in Libya was predominantly autarkic. As a matter of fact, Ghirza continued to prosper well into the fourth century: reliefs on tombstones portray both hunting and farming scenes, the latter with representations of vines, olive and pomegranate trees in addition to cereals; dromedaries, too, now figure prominently. The only development that can be associated with the withdrawal of the Roman army was the appearance of fortified farms (Barker and Jones, 1982, p. 3).

During the Byzantine period, from the fourth to the seventh century, there was a change in the balance of the economy which was largely due to a slowing down of trade. The complementarity that characterized the relationship between the Mediterranean zone and the interior lost its importance. The major event in the life of the people along the coastal littoral in Tripolitania was the invasion of the Vandals. Although they did not occupy the whole region, they impeded the development of urban life and isolated the region, despite the short-lived return of the Byzantines. The attacks of the nomads did not cause any particular disruption of rural life, judging by the case of Cyrenaica: although Synesius deplored such attacks (Roques, 1982), the density of rural settlements there reached its highest point at that time. It is possible that the development of the power of the Church contributed to its siphoning off of a large part of the agricultural resources, if one is to judge by the number of churches both in big and small towns and in the countryside. The autarkic tendency of the region and its withdrawal into itself are illustrated by the fact that, according to Synesius, the peasants from the villages on the high plateau never saw a fish, and took eels for snakes.

The hinterland kept up its settled way of life in some places well into the Islamic period (Barker and Jones, 1981, p. 38). But progress in that direction was halted from the beginning of the fourth century, primarily because of the overworking of the land from the first century onwards, which resulted in irremediable damage to the plant cover, replaced by crops, and accelerated soil erosion. At the same time, the exhaustion of surface water in a number of places intensified the process of desertification. The nomads therefore inherited the desert; they did not create it (Le Houérou, 1959, p. 118).

Conclusion

Examination of the facts shows the overall stability of the environment. The changes that occurred from Antiquity to the present are local in nature and are due to changes in the microclimate, the disappearance of forms of vegetation that were already residual in Antiquity and the destruction of the soils. These conclusions hold good in particular for the steppe zone and the more vulnerable subdesert zone.

Despite the break-up of Libya into the two provinces of proconsular Africa (subsequently Tripolitania) and Cyrenaica, and the kingdom of the Garamantes in the interior, the rural life of the country displays a certain degree of unity within each of the geographical regions described. The quality of rural development also merits attention.

The situation that prevailed at the time of the Roman Empire was already substantially called into question in the Byzantine period, before the arrival of the Arabs.

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The silphium plant in Cyrenaica

R. El-Athram

Silphium (in Greek *silphion*) was one of the most economically important products of the province of Cyrenaica during the Greek and Ptolemaic periods, but despite the strenuous efforts made by archaeologists and botanists in the last two centuries, no evidence of its continued existence in the region has been found. In this paper, I shall attempt to shed light on the plant, which has come to be considered as extinct.

Silphium was mentioned by name in ancient writings and it was depicted on most Cyrenaican coins.[1] Herodotus[2] mentions the plant, describing it as well known and of common use; Theophrastus[3] writes at length about it; Strabo[4] specifies the areas in which it grew; Pliny the Younger[5] indicated its most valuable properties.

Scylax[6] indicates that the first region to produce silphium was the Gulf of Bunbah. Theophrastus[7] mentions that the plant appeared after heavy rainfall, seven years before Cyrenaica was established. He is supported in this by Pliny the Younger.[8] This seems natural, as the Gulf of Bunbah was the area where the Greeks first landed, and this occurred at the time specified by Theophrastus and Pliny. It was the Greeks' first encounter with the plant, which may have grown in the region long before, but was not known to be of any great value until the Greek period.

The plant grew inland on the plateau between the fertile crescent and the desert, from the Gulf of Bunbah region in the east to the Surt region in the west,[9] in particular in the region near Euhesperides, a range of about 800 km in all.[10] This means that the plant grew in the region which was under Libyan control. The Libyans, who alone knew the right time at which to harvest the plant, collected it and transported it to the cities, whence it was exported to Greece.

The Greeks were unsuccessful in their attempts to breed and cultivate silphium in their country, since it was a wild desert plant.[11] Strabo describes the region in which it grew as consisting of long strips of arid land about 300 stadia in width.[12] Silphium did not appear in the accounts of the *demiourgoi* as it was not sold in the Greek market towns of the Cyrenaica province but was exported direct. It had long, thick roots which penetrated deep into the

earth. The shoot grew in the spring[13] and resembled the Ferula stem in size.[14] The leaves grew alternately on either side of the stem and sometimes opposite each other.[15] In Greek they were called *maspeton*[16] and were very similar to those of parsley or celery.[17] The stem always ended in a cluster of small rounded flowers which withered at the end of the growing season. The south wind then scattered the seeds over large areas of land.[18] Thus, the following year's crop was sown without human intervention.

If we examine the depictions of the plant which appear on coins, we find that they correspond to the descriptions given in ancient Greek texts. Two main types of coins can be distinguished, one depicting the fruit of the plant alone, the other showing the entire plant. In this connection, Robinson[19] argues on technical grounds that the coins showing the fruit alone are older than those showing the entire plant, the first type dating back to the period preceding —480.

The plant, well known during that period, had many useful properties. It was regarded as excellent fodder for cattle, as, according to Theophrastus[20] and Pliny the Younger,[21] it fattened them and rendered their meat tasty. It was also considered an excellent vegetable,[22] while the stems were cut up into small pieces and pickled in vinegar.[23] According to Athenaeus,[24] silphium was also used as an ingredient in the cooking of the fish called 'bodbon'.

Most important of all was the juice of the plant, which was extracted from the roots and stems, the juice from the roots being better than that from the stem. It was mixed with flour to make a medicinal potion which could be kept for a long time. Theophrastus[25] states that the juice would otherwise have gone bad. Pliny the Younger[26] says that the leaves of the plant were used for medical purposes, to dilate the uterus and remove the stillborn foetus, while its roots were an excellent cure for the inflammations of the respiratory tract and were used with oil in the treatment of wounds and with wax in the treatment of scrofulous swellings. Its juice, taken internally, relieved neuralgia and acted as an antidote to poisoning from weapons, snake stings and dog bites. It was also used by the aged as a digestive, as well as for coughs, dental disorders and other ailments.

The texts leave no room for doubt that silphium was under direct royal supervision and that the silphium trade was a royal monopoly. The kings of the dynasty of Battus exacted it from the Libyans as tax. After the fall of the dynasty, however, the Libyan tribes gained internal independence and sold the plant to the Greeks.[27]

The Ptolemaic kings may have restored the monopoly of silphium at a later period. There is ample evidence that the plant had been a royal monopoly, for example a chalice on which Arcesilas II is depicted surpervising the weighing of silphium[28] and the packaging of the plant into bags.[29] Strabo[30] points to the existence of an illicit trade in the plant between Cyrenaican merchants

(who may have been Libyans) and Carthaginian merchants, who exchanged it for alcohol.

Furthermore, Chamoux[31] indicates that the playwright Aristophanes (—450/—385), used the expression 'Battus' silphium' in his writings. A representation of the plant also appears on the capital of a column where King Battus I is seen next to a complete silphium plant. This may confirm the fact that silphium was a royal monopoly.[32] The plant was sold for the equivalent of its weight in silver and the shipments that were sent to Rome were kept in the Public Treasury along with gold and silver,[33] proof of its great value.

It is strange that a plant of such great importance and one under royal supervision should have disappeared altogether, for from Roman times onwards, the silphium crop dwindled rapidly. Pliny[34] mentions that when Caesar took power at the end of the Republican era, he found 1,500 pounds of silphium in the Public Treasury, in addition to gold and silver. By Nero's reign, the plant had become so rare that the emperor was presented with a twig of silphium as a very valuable gift.

Many reasons have been put forward to account for its becoming extinct. Strabo[35] explains its disappearance as being due to Libyan hostility towards the Greeks and the desire to deprive them of a great source of income by damaging the silphium roots or wrenching them from the earth. Pliny,[36] on the other hand, relates its extinction to the fact that the tax collectors *(publicani)*,[37] who rented pasture land in these parts, stripped them entirely of silphium by allowing sheep to graze there, knowing that this would bring them greater profit. (It is an undisputed fact that sheep fed avidly on silphium.)

Some people think that it became extinct as a result of climatic change or because the land on which it grew was taken over for crop farming. Such claims cannot be borne out; there is no evidence of such a change in the climatic conditions since the Greek period, and the land on which silphium grew has not been cultivated regularly since that period.

The disappearance of the silphium plant may indeed be due to the voracity of sheep; however, since there was much grazing land in the area in which it grew sheep may thus have devoured the plant without giving it a chance to multiply. Another reason may have been the increasing importance of the juice extracted from the plant's roots. This may have led to the destruction of the roots and, in turn, to the plant's extinction. Finally, we cannot overlook the reason pointed out by Strabo: the Libyans' hostility towards their occupiers, a fact obvious to anyone who has studied the history of the region up to the time of the Arab conquests.

Before concluding the discussion on silphium, it must be pointed out that this plant never appeared in Greek inscriptions, despite the fact that it was a royal monopoly. I can see no reason for this, other than the fact that

it was the Libyan tribes who controlled the plant. It was they who harvested and delivered it to the kings, who in turn exported it. With the fall of the monarchy, the Libyans sold it to the Greek rulers.

In conclusion, it must be stressed that the plant was only represented once, on the capital of a column in the Agora, where the head of King Battus is depicted next to a complete silphium plant.[38] This seems to be the only illustration of its kind yet found on a monument. Next to it are, on one side, a mask representing Tragedy and, on the other, a mask representing Comedy, with acanthus leaves underneath. These masks may symbolize the dark and the joyful sides of Cyrenaican life. The column with this capital stands in the western part of the Agora.

Notes

1. Silphium was used as an emblem on Cyrenaican coins from the time when the first such coins were minted and throughout the Greek and Ptolemaic periods. E. S. G. Robinson, *Catalogue of Greek Coins of Cyrenaica*, Bologna, 1965; C. Seltman, *Greek Coins*, p. 44, London, Spink & Son, 1977.
2. Herodotus, IV.169.
3. Theophrastus, VI.iii.
4. Strabo, XVII.20–21–22, 23.
5. Pliny the Younger, V.5; XIX.15; XXII.48, 49.
6. Scylax, 108.
7. Theophrastus, VI.iii.
8. Pliny the Younger, XIX.15.
9. A. Jones, *The cities of the Eastern Roman Provinces*, p. 356, Oxford, Clarendon Press, 1937.
10. Theophrastus, VI.iii.
11. Jones, op. cit., p. 356; F. Chamoux, *Cyrène sous la monarchie des Battiades*, p. 248, Paris, 1953.
12. Strabo, XVII.23.
13. Theophrastus, VI.iii.
14. Plant from which a medicinal gum is extracted—see Theophrastus, VI.iii.
15. Chamoux, op. cit., p. 254.
16. Theophrastus, VI.iii.
17. Pliny the Younger, XIX.15; Chamoux, op. cit., p. 254.
18. Theophrastus, VI.iii.
19. The coins bearing the depiction of the silphium fruit date back to the period before —480. See Robinson, op. cit., Pl. I, 3, 5; Pl. II, 1, 4, 6, 8 ff.; Pl. III, 1, 3; Pl. IV, 1, 3, 5, 6. The coins showing the entire plant date back to the period after —480. Ibid., Pl. V, 13, 16, 17, 21; Pl. VI, 1, 3, 8, 9 ff.; Pl. VII, 1, 5, 17, 18, 19.
20. Theophrastus, VI.iii.
21. Pliny the Younger, XIX.15.
22. Theophrastus, VI.iii; Pliny the Younger, XIX.15.
23. Chamoux, op. cit., p. 250; J. Boardman, *Greeks Overseas. Their Early Colonies and Trade*, p. 172, London, Thames & Hudson, 1980.

24. Athenaeus, XIV.623.
25. Theophrastus, VI.iii.
26. Pliny the Younger, XXII.48, 49.
27. Jones, op. cit., p. 356; Chamoux, op. cit., p. 249.
28. According to Bury, Arcesilas' chalice depicts the king supervising the weighing and packaging of wool, contrary to the accounts of most other writers who believed it depicted the king supervising the weighing of silphium. See J. B. Bury, *A History of Greece to the Death of Alexander the Great*, 3rd ed., p. 117, Fig. 46, Oxford University Press, 1963.
29. Chamoux, op. cit., p. 249; C. H. Coster, *The Economic Position of Cyrenaica in Classical Ages*, p. 12, Chicago, Johnson, 1951.
30. Strabo, XVII.20.
31. Chamoux, op. cit., p. 249.
32. This representation is the first of its kind to be found on a monument, for we have not seen this plant illustrated on any monument other than the above-mentioned column. See S. Stucchi, *Cirene, 1957–1966*, p. 114, Fig. 91, Tripoli, 1967.
33. Pliny the Younger, XIX.15; Coster, op. cit., p. 13.
34. Chamoux, op. cit., p. 250.
35. Strabo, XVII.22.
36. Pliny the Younger, XIX.15.
37. Pliny the Younger, XIX.15.
38. We know that when Rome took over Cyrenaica in —96 silphium-growing land became public property belonging to Rome and tax was imposed on the plant. See Stucchi, op. cit., pp. 113, 114, Fig. 91.

Language and migrations of the early Saharan cattle herders: the formation of the Berber branch

P. Behrens

Two types of sources provide information about the early history of Libya: the classical writers and Egyptian documents. While the former like Herodotus give at least some vivid details about the early Libyans, Egyptian sources—covering the period before the classical authors—are somewhat uniform in that they record practically nothing but ethnic names, wars, punitive expeditions and the figures of captured people and cattle. Even the Egyptian representations of the early Libyans—though informative in themselves—in general add little to present knowledge (cf. Osing, 1980, pp. 1015 ff.). By using a different approach, the present paper attempts to outline some structures of the early history of Libya.

Methodological problems

The following is based on Egyptian sources, prehistoric research and linguistic evidence. Part of the argument—the linguistic one—is based on the assumption that the Semitic languages, Egyptian, the Cushitic–Omotic languages, the Chadic languages and the Berber languages are 'genetically' related and represent one language family. The usual name for this language family today is Afro-Asiatic, the older and still used name is Hamito-Semitic. The 'genetic-language-family-model' works with the hypothesis of a monolocal 'proto-language' from which single languages or whole language branches break away either successively or all at one time. Such an event could take place for example when some of the proto-language speakers migrate, while others remain in the old home. A genetically related language family is thought to exist when different languages demonstrate such a resemblance in the various structural linguistic elements of each separate language that only a common basic system (the proto-language) provides a plausible explanation for these phenomena (cf. Sasse, 1980, p. 146).

Structuring the Indo-European languages has proved the validity of the 'genetic-language-family-model'. For the Afro-Asiatic 'language-family' such a model is postulated, and is highly probable in spite of as yet insufficient

research. But final proof has not yet been found (Semitists especially show some reluctance).

The following ideas should be considered with these reservations in mind.

Egyptian sources

The merchant-emissary Herchuef (*c.* —2230) travelled three times up the Nile and reached Kerma in Upper Nubia. He reported that the ruler of Kerma was fighting against tribes living in the area west of the fourth Nile cataract. These tribes were called Temehu *(ṯmḥw)*. Shortly after, some of these tribes migrated into the Nile valley and settled there between the second and third Nile cataracts. Archaeologically, these newcomers are called C-Group. It has been shown that they were cattle herders and kept small livestock (Bietak, 1966, p. 38). In addition, it was possible to determine the language of the C-Group people and thus the language of the Temehu as a language related to present-day Berber. This statement rests on the following evidence: roughly 500 years after the arrival of the Temehu (C-Group people), a new ethnic group moved into the Nile valley occupying the same territories as the C-Group and forming a new ethnically mixed population. The language of the newcomers was Nobiin (it forms one branch of the Nile Nubian languages and is called Maḥasi in older publications). It is still spoken in the area. Nobiin as well as the other Nile Nubian languages contains a number of words which correspond to lexemes of present-day Berber languages. To explain this linguistic substratum there is not much choice but to assume that the predecessors of the Nobiin speakers, the C-Group people or former Temehu, belonged linguistically to the Berber branch (Bechhaus-Gerst, 1983, pp. 127 ff.; Behrens, 1981, pp. 24 ff., 36 ff.; Vycichl, 1961, p. 289). Appendix I contains examples of this Berber substratum in the Nile Nubian languages.

In addition to the biography on the memorial stele of the monarch Antef II (*c.* —2218/—2069) which includes details about the reunification of Upper Egypt, we find his five dogs and a list of their names. One of the dogs, represented as a hound or slugi, has the non-Egyptian name *3b3qr*. As was shown by Basset long ago (1897, p. 89), this name corresponds exactly to a Berber word (Tuareg-Ahaggar) *abaikur* meaning 'hound, slugi'. Since the dog certainly did not come from the Ahaggar region and since Antef II was cut off from any contact with the Temehu of the north-western delta border (he battled all his life against the Heracleopolitan rulers of Lower Egypt; for the Northern Temehu (see below) the plausible explanation is that dog and name were part of a gift or tribute from the south—from the Berber-speaking Temehu or C-Group people of his days.

It appears that the Temehu were living in the dry savannah territories

adjacent to the west of the Upper Nile (second to fourth cataract) at least up to the time of Ramses II (—1290/—1224). A dedication stele of the Egyptian officer Ramose found in the Wādī es-Sebu'a (Nubia) reports that Ramose was sent out to recruit labourers for the construction of the local temple among the Temehu (Yoyotte, 1951, p. 9).

At the time of the assassination of Amenemhet I (—1991/—1962), his successor Sesostris I led a campaign against the Temehu living at the north-western edge of Egypt in territories adjacent to the Nile delta (Goedicke, 1957, p. 85; Spalinger, 1979, p. 137). The crown prince is reported to have taken all the cattle of the Temehu.

In the course of the New Kingdom the Egyptian sourees demonstrate a greater familiarity with the Temehu living in the north (adjacent to the delta) and list—beside the general appellation Temehu—the names of single tribes or tribal confederations: Libu *(rbw)* and Meshwesh *(mšwš)* among others (Hölscher, 1955, pp. 47 f.). The titles of the chiefs of these tribes found in Egyptian inscriptions reveal the language they spoke: they are called either *wr* or *ms* of the Libu or Meshwesh (Yoyotte, 1961, p. 123). The first title *wr* is Egyptian, meaning 'the great one', while *ms*—not being Egyptian—is considered to be a native designation of the Libyan or Meshwesh chief. The title corresponds exactly to a Berber word (Tuareg-Ahaggar) *mess* which means 'master', 'lord'.

Representations of the Northern Temehu found for example in the tomb of Seti I (Bates, 1914, 1970, Pl. III) show that the Libu and Meshwesh generally have beards which are unknown to Egyptians who are either clean shaven or prefer a small moustache (the Pharaoh's artificial beard is an exception). This might have been the reason that a common Berber word for 'beard, chin' *ta-mar-t* (*ta-mer-t* = 'beard' in Siwa (Stanley); *ta-mar-t* = 'chin-beard' in Tuareg-Ahaggar; *ta-mar-t* = 'beard, chin' in Kabyl; *ta-mar-t* = 'small beard' in Baamrani; *za-mar-z* = 'beard' in Senhaye) was taken over as *t3 mrt* = 'chin, beard' by the Egyptians (Sauneron, 1952, pp. 12, 13; it is, however, noted considerably later than the first appearance of the Northern Temehu). While the syllabic writing hints at the fact that it is borrowed, the proof is provided by another fact: since the Egyptian language had discarded the feminine marker suffix *-t* long before and had replaced it by the feminine article *t3* the Egyptian speaker misinterpreted in *ta-mar-t* the old feminine suffix *-t* of the Berber forms as being part of the word's root and understood the secondary feminine gender marker prefix *-t* of Berber as his familiar feminine article *t3*. The hieroglyphic orthography as well as the Coptic form Ⲙⲟⲣⲧ = *mort* = 'beard' (Westendorf, 1965–77, p. 100) bear witness to this misunderstanding.

Commentary on the Egyptian sources

It is a view long held among Egyptologists that the Southern Temehu of the Herchuef reports and the Northern Temehu of the early Middle Kingdom were identical people: that either some of the southerners migrated north (Behrens, 1981, p. 36; Hölscher, 1955, p. 50; Osing, 1980, p. 1020; Spalinger, 1979, p. 143) or some of the northerners moved south (Bates, 1914, 1970, p. 49; Schenkel, 1975, p. 69). The following, however, casts some doubt on the validity of this idea:

1. As Figures 1 and 2 demonstrate, the regions which stretch to the west of the Nile—the areas where the alleged migration of the Temehu must have taken place some time between —2200 and —2000—have had less than 50 mm annual rainfall from —3050 to the present day. Because grazing areas for cattle require a minimum of 500–625 mm annual rainfall (McHugh, after Wendorf, 1980, p. 271), and the maximum distance between two waterholes cannot exceed 20–36 km (twice the

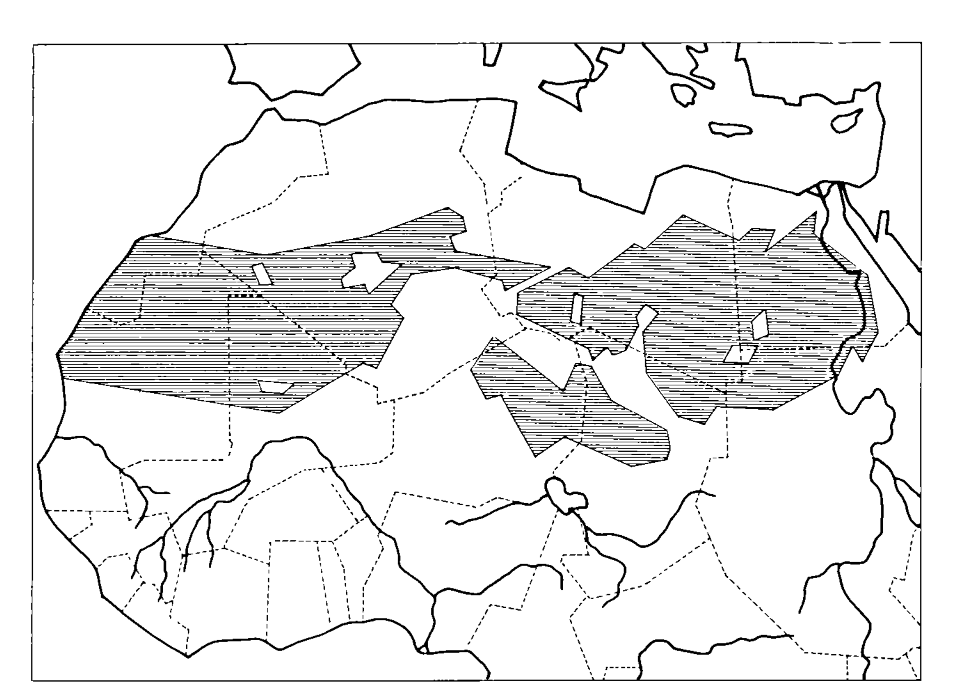


FIG. 1. Reconstruction of desert regions with less than 50 mm annual rainfall for the climax of Saharan cattle nomadism, *c.* —3500/—2500 (after Hester and Hobler, 1969, Fig. 155).

maximum distance between grazing ground and waterhole reported by Gabriel, 1978, p. 32), any theory postulating Temehu migrations with their cattle is simply without basis, because the necessary climatic conditions did not prevail.

To assume a northward Temehu migration without cattle does not make much sense either: the Middle Kingdom source, referring to a time immediately or shortly after the alleged migration, implies not only a certain size of the population of the Northern Temehu—otherwise the crown prince would not have led the campaign against them personally—but emphasizes the fact that they had cattle because it says that the crown prince brought 'cattle of all kinds beyond number' *(mnmn.t nb.t nn ḏr.w = s)*. Even with pharaonic exaggeration, the number must have been substantial.

To assume a southward move of the Northern Temehu without cattle is not only contradicted by the fact that the existence of the Northern Temehu is noted 200 years later than the Southern Temehu.

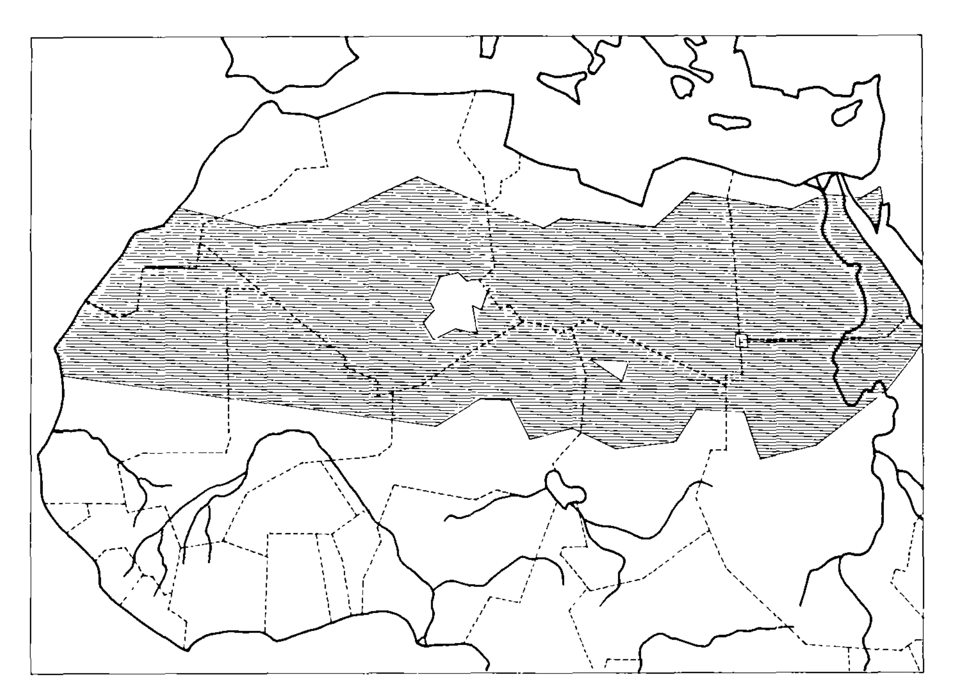


FIG. 2. Reconstruction of desert regions with less than 50 mm annual rainfall during the Roman occupation +1–400 (after Hester and Hobler, 1969, Fig. 156).

They were also numerous (the ruler of Kerma led the campaign against them) and did possess cattle, as the archaeological evidence of the C-Group sites demonstrates (Bietak, 1966, p. 38).

2. Northern and Southern Temehu are culturally not quite identical. The C-Group people (Temehu living in the Nile valley) were called Nehesi *(nḥsj)* by the Egyptians and were often recruited as mercenaries. Representations of these mercenaries show their characteristic dress as a single shoulder strap attached to a high waistband (Fisher, 1961, p. 66); the single shoulder strap should not be confused with the crossed shoulder straps of the Tehenu *(ṯḥnw)*. The Northern Temehu are characterized by cloaks, penis sheaths, etc. (Osing, 1980, pp. 1018 f.). On the other hand the ostrich feather—a symbol for military rank or status as tribal chief—is a feature of both Northern and Southern Temehu (Helck, 1967, pp. 140, 148: the Nehesi who wear the feather) and Hölscher, 1955, p. 36 (referring to a Libyan chief who after being defeated throws his feather away).

Evaluation

In analysing the Egyptian sources, the following conclusions seem to be justified: during the last centuries of the third millennium before our era populations called 'Temehu' by the Egyptians lived in the territories west of the Upper Nile region and in the territories west of the Nile delta. Both groups share cultural features but they are not identical. Linguistic evidence shows that the southern group spoke a language related to present-day Berber. It also hints strongly at the assumption that the northern group too spoke a language related to present-day Berber. Since the geographic distribution of the two groups cannot be the result of direct migration through the territories west of the Nile other migration patterns are required to explain the geographical distribution of the two groups.

Berber sources

As was shown by Vycichl some years ago (1952, pp. 198 ff.), the Berber languages of the Maghrib have preserved a number of words which, by the nature of their root structure, were borrowed from Punic. Punic was the language spoken in the Phoenician settlement of Carthage and its immediate vicinity. The existence of these Punic forms in Berber could be the result of either direct contact between the Phoenician colony and Berber-speaking populations or of indirect contact—through the speakers of a third language

who first maintained relations with Carthaginians and later with Berber-speaking tribes. But the phonological shape of the borrowed structures which has changed only in accordance with the general development of the Berber languages, plus the phonological correspondences between the Berber forms and the respective North-western Semitic equivalents speak in favour of direct contact and exclude the second possibility. (Beside that the question would arise which language—not being related to Berber—could have played the part of intermediary.)

In attempting to give a date for the contact between Punic and the Berber languages the following may be stated: Punic was spoken in Carthage and the surrounding area between —800 and *c.* +200 (Moscati et al., 1980, p. 10), but according to St Augustine the peasants around ancient Hippo were still speaking Punic in his days—*c.* +400 (Vychichl, 1952, p. 198). A more precise date within this considerable time span is provided by the fact that all definite borrowings belong to the semantic field of agriculture. Since the Numidian King Masinissa (—238/—148) is reported to have introduced agriculture into his kingdom it is probably safe to assure that the contact could not have taken place before his reign. In spite of this, an earlier date seems to be more plausible: Herodotus refers to the cultivation of olives (IV.195) and the word for 'olive/olive tree' is borrowed from Punic (see Appendix IV). So the time of contact might well have been around —450. And that means that Berber-speaking populations were living in the vicinity of Carthage at that date.

The so-called Old Libyan inscriptions from the territories of the Numidian kingdoms (partially present-day Tunisia) have provided a number of words corresponding to lexemes of present-day Berber languages. Examples are Old Libyan roots like GLD = *agellid* = 'king'; W = *u* = 'son (of)'; WLT = *ult* = 'daughter (of)'; MT = *m(m)a(t)* = 'mother' (Bynon, 1970, p. 68). These inscriptions date back to the second and first centuries before our era.

Commentary on the Berber sources

The linguistic material of Punic sources postulates the area around Carthage as the zone of linguistic contact. The inscriptional material of Old Libyan sources originates mainly from the same area. Both sources imply the conclusion that around —400 to —200, populations speaking an idiom related to present-day Berber languages were living in this particular area. Both sources are independent from each other. So it seems safe to accept their conclusions as historical fact.

Climatic evidence

Before —7000 the climate of the Sahara was for some millennia as arid as today. A wet phase starting after —7000 resulted in a savannah-like vegetation in large parts of the Sahara (Taute, 1978, p. 58). As a consequence, a considerable increase of the Saharan population can be observed around —5000 (Smith, 1978, p. 220); Kuper (1978, p. 67) tends to put the population increase earlier, around —7000. But Figures 1–3 demonstrate that the wet phase was short. A new dry phase which began in about —4500 resulted in new desertification, a process which has not ended even today.

Analysis of the desertification process

Though the process of desertification shown rather schematically on Figs. 1–3 may have differed regionally to a certain extent, one important phenomenon

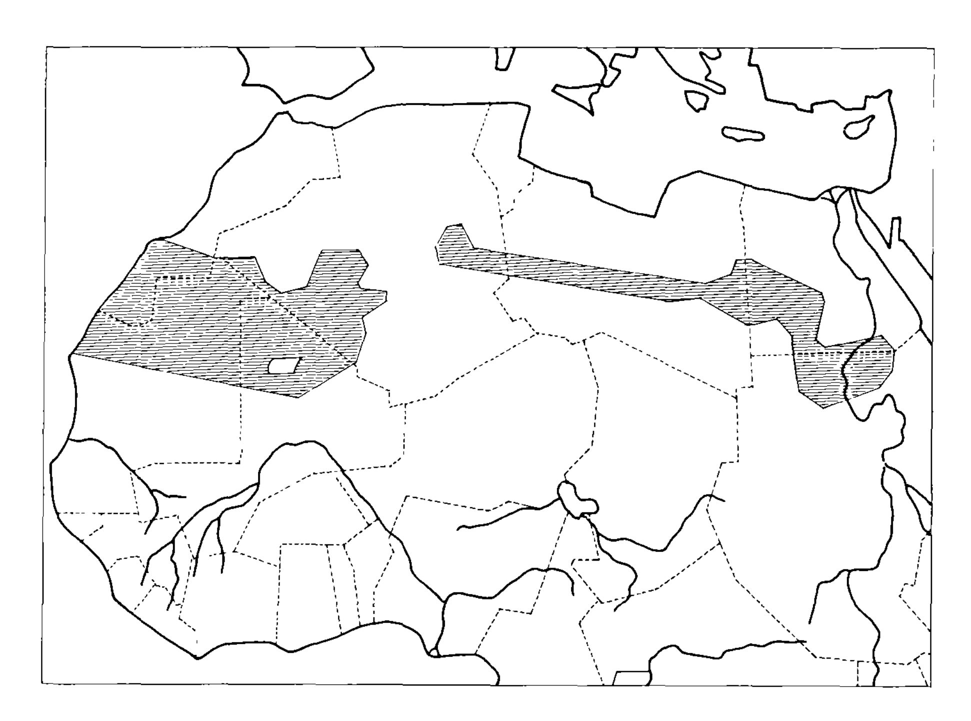


FIG. 3. Reconstruction of desert regions with less than 50 mm annual rainfall for the Saharan Sub-Pluvial, *c.* —6000/—5000 (after Hester and Hobler, 1969, Fig. 154).

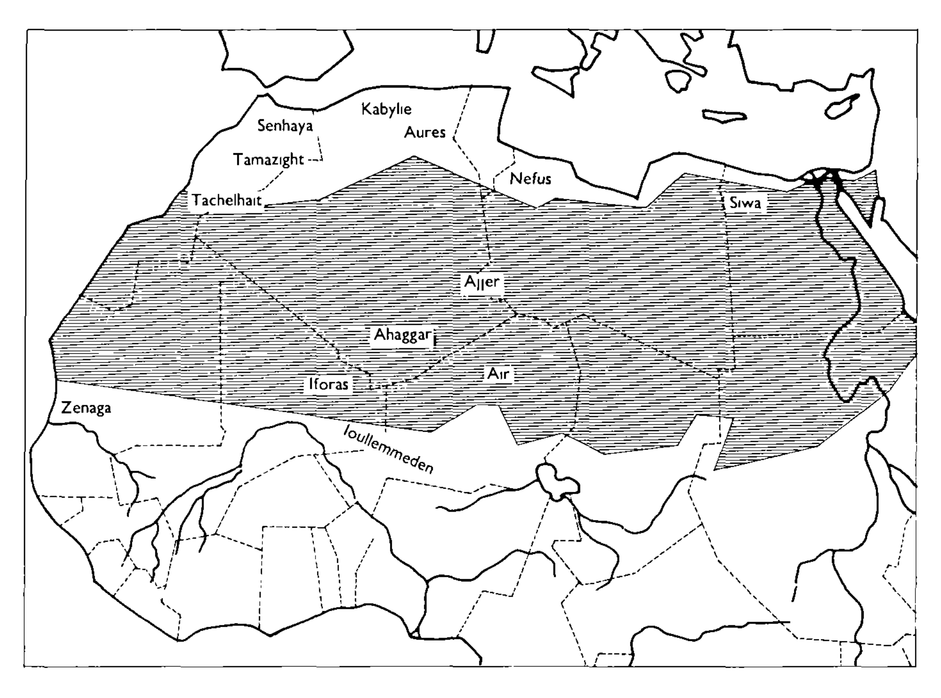


FIG. 4. Modern desert regions with less than 50 mm annual rainfall (after Hester and Hobler, 1969, Fig. 157) and present distribution of Berber-speaking groups.

can be observed: two large areal blocks—one in the eastern part and one in the western part of the Sahara—have never had more than 50 mm annual rainfall, not even during the high point of the wet phase. Taking into consideration the climatic conditions necessary for raising cattle or small livestock—cattle require 400–625 mm annual rainfall, small livestock 200–400 mm (McHugh, after Wendorf, 1980, p. 271)—these two areas have never been suitable for cattle or small livestock herders. Only the areas north and south connected by a corridor between the two blocks offered the necessary climatic conditions. During the process of desertification these arid blocks became larger, leaving only a small climatic corridor between the grazing areas of the north and the south. And some centuries after the beginning of the second millennium before our era the gap between the blocks was closed: substantial north-south migrations of cattle or small livestock herders were virtually impossible from then on.

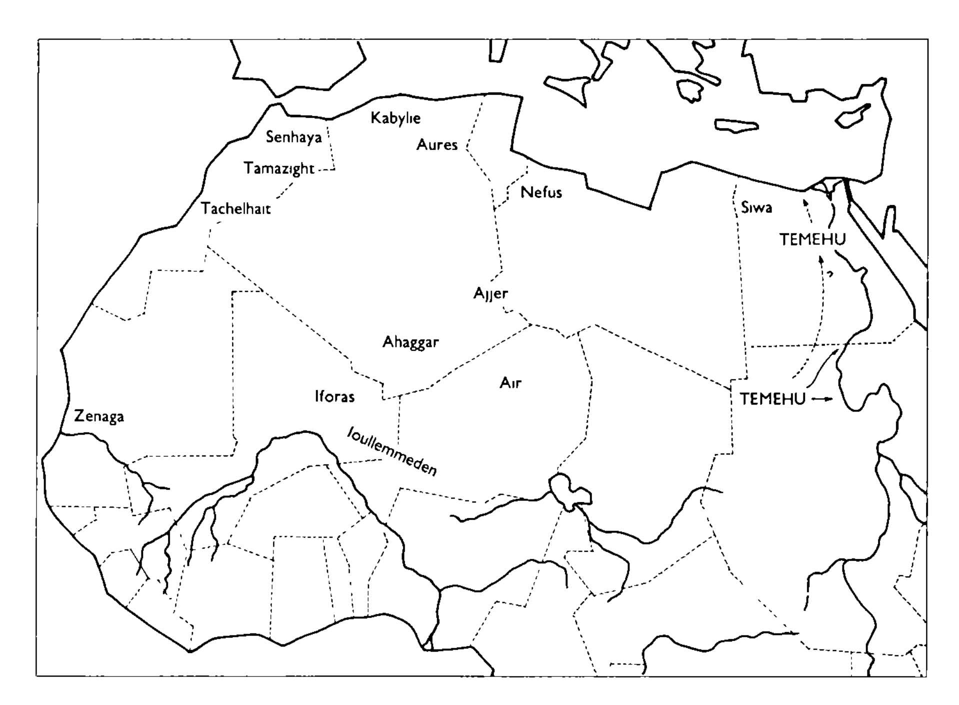


FIG. 5. Eastward migration and alleged northward move of Temehu-Berber c. —2300; present distribution of Berber-speaking groups.

Population distribution

The present geographical distribution of Berber-speaking populations is obviously the result of the desertification of the Sahara described above: they live north and south of the zone of maximum aridity, as well as occupying the mountainous areas which receive little rainfall. This reflects exactly the distribution of Berber-speaking communities in early history: during the last centuries of the third millennium before our era Berber-speaking Temehu lived south of the eastern Sahara desert block, speakers of Berber were found in the area of Tunisia around —450 and adjacent to the western border of the Nile delta around —2000—a strong indication for a linguistic continuum of Berber dialects in the north.

Scenario of migrations

The facts that (a) Berber-speaking communities were living north and south of the eastern arid block of the Sahara by the end of the third millennium before our era, (b) due to climatic conditions substantial migrations of cattle and small livestock herders between the grazing areas north and south of the desert block were impossible after the beginning of the second millennium, and (c) no linguistic evidence of speakers of other Afro-Asiatic languages has been found in the Saharan area, inspire the scenario given below,

Sometime during the seventh and sixth millennia speakers of the later Berber languages broke away from the communities of Afro-Asiatic speakers and migrated into Saharan territories. They were cattle and small-livestock herders as Appendices II and III prove (the words for 'bull', 'cow', 'milk' and 'bow'—the cattle herder is always traceable and has to defend his 'property'—are common Afro-Asiatic words). The progressing desertification split the communities into a northern and a southern group and was finally responsible for the present geographic distribution of the different Berber languages.

Due to the high prestige cattle herding still has today it might also be concluded that some hunter gatherers or early agriculturists living at the same time in Saharan territories were absorbed by the Berber-speaking cattle herders. Rock art of the cattle-herding period showing racially mixed cattle herders seems to support this assumption.

Appendix I: Berber loan words in the Nile Nubian languages

1.	Nile Nubian	'onion' = *fill e*	Nobiin
		fell e	Fadidja
		bill e	Dongola, Kenuz
	Berber	'onion' = *efĕ l ēli*	Tuareg-Ahaggar
		afi l u	Siwa (Quibbel)
		afi l -an (pl.)	Siwa (Stanley)
		af l il	Ghadamès
		ifa l il	Sokna
2.	Nile Nubian	'navel' = *f u t*	Nobiin
		f ū d	Fadidja
	Berber	'navel' = *t-ebout-out*	Tuareg-Ahaggar
		ab u d	Baamrani
		z-im i ṭ-ṭ	Senhaye
		t-im i -ṭ	Kabyl
3.	Nile Nubian	'stick' = *gá ll e*	Nobiin
		ga ll ǽ	Fadidja
	Berber	'stick' = *aġou l a*	Tuareg-Ahaggar
4.	Nile Nubian	'kidney' = *ji g il ti*	Dongola
	Berber	'kidney' = *t-ag ẓ el-t*	Tuareg-Ahaggar
		t-a dj el-t	Siwa (Quibbel)
		t-a j el-t	Siwa (Stanley)
		t-ig ẓ el-t	Baamrani
		t-igeẓẓ al-t	Senhaye
		t-igeẓẓ el-t	Kabyl
5.	Nile Nubian	'wolf' = *je ll ek, jelek*	Nobiin, Dongola, Kenuz
		je ll ek	Fadidja
	Berber	'wolf' = *aġou l eh*	Tuareg-Ahaggar

6. Nile Nubian	'mouse' =	*jigi r*	Nobiin
		jigi rr	Fadidja
Berber	'rat' =	*eġîġer*	Tuareg-Ahaggar
7. Nile Nubian	'string' =	*sēr*	Dongola, Kenuz
Berber	'thin tape' =	*ăsîra*	Tuareg-Ahaggar
	'small belt' =	*asaru*	Kabyl
8. Nile Nubian	'sheep' =	*eged*	Nobiin, Dongola, Kenuz
		eged	Fadidja
Berber	'sheep' =	*yaγid*	Siwa (Quibbel)
		yaγid	Siwa (Stanley)
	'goat' =	*eγeid*	Tuareg-Ahaggar
		ajəgad	Zenega
		t- aγaṭ-ṭ	Baamrani
		z- aγa -ṭ	Senhaye
		iγid	Kabyl
9. Nile Nubian	'water, Nile' =	*aman*	Nobiin
		aman	Fadidja
Berber	'water' =	*âman*	Tuareg-Ahaggar
		āmân	Siwa (Quibbel)
		amán	Siwa (Stanley)
		aman	Kabyl
		aman	Baamrani
		aman	Senhaye
		aman	Zenega

Comments on Appendix I

General remarks

The Nile Nubian languages and the Berber languages are not considered to be genetically related. While Berber is an undisputed member of the Afro-Asiatic language family, Nubian has been classified as either Eastern Sudanic (Greenberg, 1966) or—more recently—as Northern Sudanic (Ehret, 1983, p. 378). If Berber and Nile Nubian share words displaying identical semantics and comparable structures of the word roots, these words—not being of common genetic origin—would have to be considered as loan words resulting from close contact of speakers of the Nile Nubian dialects. If borrowing is determined, the question arises whether Berber borrowed from Nile Nubian or vice versa.

Comments on the word list

No. 1. Contrary to the other Berber languages, Siwan has already reduced the word root to a two-consonant structure and corresponds to Nile Nubian.

No. 2. The Berber words display either masculine or feminine gender. The latter is produced by pre-fixing or suffixing *t*.

No. 4. At first sight the word stems Nubian *jigil* and Berber *gizal* do not seem to correspond. However, assuming a common ancestor **gijal*, both forms could be explained as being the result of very simple phonological processes: fronting would produce *gizal*, assimilation of the middle consonant and subsequent palatalization of the first would produce *jigal*. In addition to this possible explanation of the observed divergence, three further arguments support the assumption of *jigilti* being a Nile Nubian borrowing from Berber: (a) the absolute identity of meaning; (b) the fact that the final consonant of the Nile Nubian form is *t* which corresponds exactly to the old Berber feminine gender suffix *t* displayed by all Berber examples; (c) the fact that three-syllabic words are extremely rare in Nile Nubian and are normally suspected to be borrowed (Bechhaus-Gerst, 1983, p. 127).

No. 5. Here the final consonants Nile Nubian /*k*/ and Tuareg-Ahaggar /*h*/ do not correspond. It can be shown though that in Afro-Asiatic as well as in the Berber context Tuareg-Ahaggar can replace the velar occlusives /^{+}g/ and /^{+}k/ by /*h*/:

Tuareg	'wild ass'	= *ahou l i l*
Magi	'donkey'	= *k u l u l*
Kaffa	'donkey'	= *k u r o*
Oromo	'donkey'	= *h a rr e*
Saho	'donkey'	= *ok a l i*
Amharic	'donkey'	= *ah i yy a*
Banana	'donkey'	= *k ɔ r ɔ ra*
Cibak	'donkey'	= *kwa r a*
Tuareg	'eagle'	= *eh e d er*
Kabyl	'eagle'	= *ig i d er*
Baamrani	'eagle'	= *ig i d er*
Zenega	'eagle'	= *g ū ď ɔr*^{h}

No. 8. The original meaning of the lexeme was doubtlessly 'small livestock' which later became either 'sheep' or 'goat'. The Zenega form has preserved most of the 'original' lexeme structure. The rest of the entries show peripheral 'erosion' as well as weakening of the original /*g*/ to /*γ*/.

Conclusion

Reviewing the examples given as Nile Nubian borrowing from Berber, the following regularities and irregularities can be stated:

1. Berber */g/* or */ġ/* corresponds regularly either to Nile Nubian */g/* or to Nile Nubian initial */j/* when this is followed by a front vowel. The only exception (No. 4)—against six regular cases—can be explained as a result of morphophonemic processes (see above).
2. Nile Nubian */ll/* in middle position in the word corresponds regularly to */l/* in Berber (Nos. 1, 3 and 5).
3. Nos. 1–7 show in Nile Nubian only the lexeme, while the Berber forms have either a vowel representing an old article or the prefixed */t/* of a secondary feminine gender formation. In contrast, the Nile Nubian lexemes (Nos. 8 and 9) start with a vowel. The explanation is that in both cases partially 'eroded' lexemes have been borrowed. For No. 8 Siwa and especially Zenega provide the more 'complete' lexeme structure, while in case of No. 9 *am.an* (*-an* is the Berber plural suffix) other Afro-Asiatic languages have retained the 'original' word structure: *yamma* = 'the sea' (Syriac), *jm* (= *jvm*) = 'the sea' (Egyptian), *yam* = 'water' (Bēdja).
4. In two cases grammatical morphemes—the Berber feminine suffix *-t* in No. 4 and the Berber plural marker *-an* in No. 9 are found in Nile Nubian, thus indicating the direction of borrowing: by Nile Nubian from Berber.

Considering the regularities and the explanation of the irregularities one is inclined to conclude: the systematic correspondence of the compared Nile Nubian and Berber lexemes is far too strong to be ruled out by chance identity in semantics and chance identity in structure. Therefore a Berber substratum in the Nile Nubian languages can hardly be disputed.

Appendix II: Common Afro-Asiatic denominations for 'ram', 'bull/cow' and 'milk/to milk'

A. 'Ram'

Berber	*ê k r e r*	Tuareg-Ahaggar
	a k r a r	Nefus
	i kerr i	Kabyl
	i k̄arr i	Senhaye
	i k r u	Šilḫ (= 'young wether')
	ə̣ g r ə̣ r^h	Zenega
Chadic	*kir*	Angass (= 'ram kept in the house for fattening')
	kar o	Seya
Cushitic	*kol a*	Burji (= 'castrated ram')
	i 'al é	Ma'a
Semitic	*'l*	Ugaritic
	'aii l	Hebrew
	ā l u	Akkadian

B. 'Bull/cow'

Berber	*e s ou*	Tuareg-Ahaggar (= 'bull')
	t- ə šš i	Zenega (= 'cow')
Chadic	*ŝ a*	Hausa (= 'bull')
	ƚ a	Cibak (= 'cow')
	ƚ a xa	Gələvda (= 'cow')
	ƚ a -ta	Gabin (= 'cow')
Cushitic	*s a h̄*	Rendille (= 'cow')
	s a '	Boni (= 'cow')
	s a ʿ	Somali (= 'cow')
	s a' a	Oromo (= 'cow')
	s á a	Burji (= 'cow')

Omotic	*z ɔ́ -ku*	Magi (= 'bull')
	é š a	Shimasha (= 'goat')
Semitic	*š*	Ugaritic (= 'sheep')
	š ā'	Arabic (= collective 'sheep')

C. 'Milk/to milk'

Chadic	*a n e m*	Musgu (= 'milk')
	n u m	Buduma (= 'to milk')
	n u m	Logone (= 'to milk')
Cushitic	*e l m*	Oromo-North (= 'to milk')
	a l m	Oromo-Waata (= 'to milk')
	a l b	Oromo-Munyo (= 'to milk')
	e l e m -tu	Oromo-North (= 'milking vessel')
	i l i b a	Burunge (= 'milk')
	i l i b a	Alagwa (= 'milk')
	l i b a	Asa (= 'milk')
Semitic	*a l ä b a*	Gurage-Zway (= 'to milk')
	a l ä b a	Gurage-Maskan (= 'to milk')
	a n ä b a	Gurage-Caha (= 'to milk')
	h a l i b	Tigre (= 'milk')
	ḥ a l i b	Geez (= 'milk')
	ḫ a l a b u	Akkadian (= 'to milk')
	ḥ a l a b	Arabic (= 'milk')
	ḥ l b	Ugaritic (= 'milk')

Comments on Appendix II

A. 'Ram'

Replacement of the velar occlusive /*k*/ by the glottal stop /'/ is a phonological process which can be observed frequently in Afro-Asiatic linguistics. So Egyptian *'j3* =/'-*y*-(*r* or *l*)/= 'donkey' corresponds to Magi *kulul*, Saho *okali*, Kaffa *kurō*, all having identical meaning, or Egyptian *š'.t* =/*š*-'-*t*/= 'knife' corresponds to Burji *šuko*, Dobase *siko*, Janjero *sikō*, Moča *šikko*, all meaning 'knife', with the exception of Janjero where it stands for 'dagger' (the Egyptian -*t* is a feminine gender marker and obviously a specific innovation in Egyptian).

B. 'Bull/cow'

Originally this root must have meant 'domesticated animal'. The semantic shifting from this meaning to 'bull/cow' and to 'goat' or 'sheep' might reflect an economic and/or ecological change in the situation of the respective speakers. For Chadic *tl* =/*l*/ representing */*s*/, compare Newman and Ma (1966, p. 226).

C. 'Milk/to milk'

The semantic differentiation 'milk' and 'to milk' is a clear indicator that this lexeme means 'milk of a domesticated animal' and not the milk with which a sibling is fed.

Appendix III: The common Afro-Asiatic lexeme for 'bow'

Berber	*t-aġ a ṅ h é*	Tuareg-Ahaggar
Chadic	*k i s e*	Musgu
Cushitic	*q ā n s o*	Somali
	' ā s	Boni
	q i s -t	Bilin
	g i s -t	Agau
Semitic	*q a š -tu*	Akkadian
	q š -t	Ugaritic
	q a š -ta	Aramaic
	q a w s	Arabic
	q e s -t	Geez
	q e š e-t	Hebrew

Comments on Appendix III

Under certain phonological conditions—following a nasal consonant by example—common Berber */z/* is reflected by */h/* in Tuareg-Ahaggar.

The following Kabyl/Tuareg-Ahaggar lexemes demonstrate this: *enz/enh* ='to sell'; *ffunzer/funher* ='bleeding of the nose'; *tinzert/tenhert* ='nose, nostril'; *izi/ehi* ='the fly'; *agelzim/aġelhim* ='hoe'.

Like Tuareg-Ahaggar, the majority of the lexemes of the Semitic and Cushitic branch have retained the old feminine gender, but all other languages with the exception of Somali have lost the second radical */n/*.

Appendix IV: North-western Semitic (Punic) loan words in Berber

1. Berber	'reed' = *ayan = im*	Kabyl (Dallet)
	'reed' = *ayan = im*	Šilḥ
	'tube' = *γan = im*	Nefus
	'reed' = *t-agum = am-t*	Baamrani
North-western Semitic (Punic)	'tube' = *q n*	Ugaritic
	'reed' = *qāne(h)*	Hebrew
	'tube, reed' = *qanû*	Akkadic
	'reed, lance' = *qana-t*	Arabic
2. Berber	'cucumber' = *t-aγess = im-t*	Tuareg-Ahaggar
North-western Semitic (Punic)	'cucumber' = *κισσου*	Punic
	'cucumber' = *qišš u'*	Hebrew
	'cucumber' = *qišš û*	Akkadic
3. Berber	'olive' = *t-aẓẓ it = un-t*	Baamrani
	'olive' = *z-a ẓ iz = un-t*	Senhaye
	'oil' = *a ḣ ât = im*	Tuareg-Ahaggar
North-western Semitic (Punic)	'olive tree' = *z t*	Ugaritic
	'olive tree' = *z ēta*	Aramaic
	'oil, olive' = *zayit*	Hebrew
	'olive tree' = *zayt*	Arabic
	'olive tree' = *zayt*	Geez
4. Berber	'onion' = *aẓal = im*	Baamrani
	'onion' = *eẓ l = im*	Kabyl (Newman)
	'onion' = *aẓal = im*	Šilḥ
North-western Semitic (Punic)	'onion' = *baṣal*	Hebrew
	'onion' = *baṣal*	Arabic
	'onion' = *baṣal*	Geez
	'onion' = *bäṣäl*	Tigre

Comments on Document IV

General remarks

The North-western Semitic material is completed with data from other Semitic branches. Since Punic lexemes are not abundant only No. 2 shows the Punic form. All Berber entries demonstrate their nature as borrowed words by the suffixed external plural ending '*-im*' which is found only in North-western Semitic (Moscati et al., 1980, p. 87). Punic being a member of this Semitic sub-branch is the only plausible donor of these forms (Arabic plural formation is completely different).

Comments on the word list

Nos. 1 and 2 show that */g/* and */γ/* in Berber correspond to the North-western Semitic glottal occlusive */k/* and velar plosive */q/*. In No. 3 two of the three North-western Semitic lexemes display the reduced two-consonant structure of the Berber borrowed words. The proto-Semitic root was obviously triliteral as Arabic, Geez and Hebrew suggest. Tuareg-Ahaggar shows */h/* instead of */ẓ/* but the Comments on Appendix III demonstrate that this is a regular correspondence. In No. 4 the Berber forms have dropped the initial */b/* of North-western Semitic. This is in contrast to the later replacement of the Punic borrowing by an Arabic borrowing for the same lexeme: *ḷe-bṣel* (Kabyl; Dallet); *el-baṣel* (Zenega); *bṣal* (Nefus); *z-ibṣel-z* (Senhaye); Kabyl and Zenega show the Arabic article while Senhaye has 'berberized' the loan-word.

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Libyco-Berber relations with ancient Egypt: the Tehenu in Egyptian records

A. H. S. El-Mosallamy

To the Egyptians, Libya was part of the vague area described as the 'west'. Even Queen Hatshepsut of the XVIIIth Dynasty considered that the western reaches of Egypt stretched as far as the mountain of Manu, the 'sun-set'.[1] Terms such as 'barbarians' were used to designate the people in the oases, tribes of foreign men who were possibly of European origin[2] and entered through the western frontiers of Egypt.[3] It is said that Tebesti-Ennedi was a source of emigrations to the Nile valley.[4]

The ethnic name Tehenu was used by the Egyptians as a kind of contrast to other foreign nations, such as Asiatics.[5] It also denoted 'inhabitants of the countries of Tehenu', or 'the white-skinned', or those who inhabit west of the Nile valley and north of the Negro zone.[6]

Pre-dynastic records such as Arki Knif have signs similar to those used to designate the Libyans in the historical Egyptian records.[7] The sign on King Scorpion's statue (*c.* —3500), found in Abydos, bears the oldest Libyan name known to the Egyptians; it is 'Tehenu'. It is deduced that Scorpion had to fight the Tehenu while unifying Egypt.

The Tehenu were known to the Egyptians as 'the westerners', since they lived close to the valley of the Nile.[8] It seems that the Tehenu were the first Libyans who settled and domesticated animals. The earliest evidence of Libyan cattle is that afforded by the Vth Dynasty relief showing the Tehenu suppliant to Sahure.[9] The other references are to animals taken as booty by Merneptah,[10] and those shown in a Libyan tribute in a XIIth Dynasty tomb-painting at Beni Hasan.[11] Libyan cattle had a widespread reputation and echoes of them are found in Homer.[12] Accurate investigation would show that the earlier and best cattle probably originated from the regions of the Tehenu.

Though the word Tehenu also had a general significance, the Tehenu had occupied the oases and the Fayyūm since early historic times. The scenes in the Sahure Temple indicate that the Libyans, even in the Vth Dynasty, had reached the south of Memphis.[13] The oases were not conquered by the Egyptians until the time of the New Empire. There is good evidence that the oases came under foreign chiefs, who sent their tribute to Egypt in the period of the XIIth Dynasty.[14] The Egyptian officials, for various reasons, used to visit 'the

land of the oasis dwellers'.[15] It is almost certain that the oases dwellers' mentioned in Egyptian records were the Tehenu. When the tribute was exacted from the oasis dwellers and sent to Hatshepsut, it was certainly from the Tehenu.[16] It is therefore assumed that the Egyptian government in the XVIIIth Dynasty sought to centralize the collection of tribute from the Tehenu. The chief of 'all the oasis country' is mentioned in the Egyptian records. This is assumed to be an honorary title created for the occasion of collecting tribute for Hatshepsut.[17] The oases were colonized by the Egyptians permanently under Ramses III and planted with vineyards. Later on, most of the oases were famous for certain crops or trees, according to the activities of the inhabitants of the various periods.[18]

As will be seen later, there were always changes in population composition in the various regions of North Africa. The Tehenu were not always the only population of the oases and the northern desert. It is said that the oasis of Khargah was used as a place of banishment, perhaps, for both Libyans and Egyptians.[19] For unknown reasons, the inhabitants of the oasis of Dakhlah were, even in later times, Libyco-Egyptians.[20]

The constant influx of Libyans towards the delta, which was open to their inroads from the west, gave the western delta a Libyan character preserved even down to the time of Herodotus. The Tehenu settled quite early in a limited area on both sides of the Egyptian border, and consequently were similar in features and dress to the Egyptians. This similarity led historians to think that they were one and the same.

In order to understand the fusion of these tribes, it is essential to know its development, heroes, conquerors, wars and conquests of which no echo or indication has reached us.[21] From the very beginning of the northern kingdom in the delta, the Pharaoh fought the Libyan invaders. This kingdom either had Libyan characteristics or owed its origin to a Libyan source.[22] Shepherds had moved to pastoral places west of the delta and the oases since prehistoric periods. Libyans of the same race were found inhabiting the north-west part of the delta up to the Canopic branch in historical times.[23] It is certainly helpful to determine regions amenable to agriculture in order to locate the places where agricultural communities were established. The most fertile portions of Libya were close to the Kinyps river where the land was fertile for growing grain. The vicinity of Euhesperis was good for cereals.[24] Cyrenaica produced more than one crop per year.[25] The inhabitants of Ammonium and the oases had been cultivators from the very beginning. What is known of the methods the Garamantes followed in preparing their land for cultivation suggests that they were situated in the oases.[26] Such a suggestion may raise the question of whether there was any similarity between the agricultural methods of the Garamantes and those of the Tehenu inhabitants of the oases.[27]

Evidence shows that the western delta was deeply influenced by the

Libyan invaders. In the Old Kingdom, the cults of the Libyan Horus (hawk-god) and his mother Seht-Horus, the patroness of cattle, were established in the third district of the delta, and spread in the following periods from west of the delta to Barca.[28] Such a cult was natural in the west of the delta, since the Egyptian records show that it was the home of animals that cannot graze in pastures, and the western parts remained pastures until late periods.[29] El-Bakri, who wrote in the eleventh century of our era, mentioned the memory of the old cult of the bull Gorzil in Libya.[30]

The temple of Sais, in the western delta, the chief centre of Libyan influence in Egypt, bore the name of 'House of the king of Lower Egypt'.[31] The chief goodess of this temple was Neith ('the terrible with her bows and arrows') and she was 'living in the west'. The Libyans of north-west Egypt, especially in Sais, tattooed the emblem of Neith upon their arms. It seems that Sais was the residence of a Libyan king of the delta at a certain time. The origin of the *uraeus*, the royal serpent of the Pharaohs, is said to be traced to an early Libyan king of the delta, as shown from the reliefs discovered in Sahure's pyramid-temple at Abusir bearing the drawing of four Libyan chiefs wearing on their brows this royal emblem. It is worth noting that the Tehenu was the principal Libyan tribe who used to infiltrate into Egypt before the Libyan invasions, which will be dealt with later.

The victories of Narmer over the Libyans found an echo in Egyptian folklore. He is said to be the man who left his family for his birthplace, Libya, because of the intrigue of his brother's wife. The element of truth in this story led the fleeing brother to be identified as Narbata (Narmer).[32] Narmer was obliged to punish the rebellious Libyan *nomes* (provinces) in the western delta and took a great number of captives. This was considered to be almost a deportation of the whole district.[33] It is worth noting that by the time of Narmer the fusion of those of Libyan and Egyptian origin was so advanced that Breasted suggested the existence of Libyan *nomes* in the western delta.[34] An ivory cylinder commemorates Narmer's victory over the Libyans in the west,[35] which is connected with the establishment of Libyan *nomes* in the western delta. As for the oases, it is suggested that they had been within the administrative sphere of Egypt since the Old Kingdom.[36] But here is no evidence that the oases were annexed to Egypt before the reign of Ramses III of the XXth Dynasty.

Certain historians think that both Narmer and Scorpion won their triumph over Egyptians, not Libyans.[37] It could be said that both points of view are right inasmuch as Egyptians had inevitably mingled with Libyans since the prehistoric periods. On the one hand, the oases were under foreign chiefs who paid tribute to the Pharaohs.[38] On the other hand, climatic changes and the barrenness of the Libyan desert forced the Libyans to migrate towards the Nile valley in successive waves. According to Egyptian records, the Tehenu settled in the delta, the Fayyūm, Wādī-el-Natron and along the west side of

the Nile valley.[39] This position of the tribes remained the same till *c.* —1200, except for some internal exchanges between the Libyan tribes. The external factor in these exchanges was the appearance of the sea people on the northern African shores.[40]

The natural result of long periods of mixing of people of different origins was a gradual fusion to the extent that in certain cases it became difficult to distinguish Libyans from Egyptians. An example of this difficulty is the plate entitled by Maspero *A Troop of Libyans Hunting*,[41] for the figures are in fact Egyptians wearing the kilt and having curly hair and using a type of bow seen on one of the Heracleopolis vases.[42] In fact, constant pressures from west eastwards in the search for fertile land caused permanent movements of the tribes. So, the Meshwesh pressed the Rebu and the latter pressed the Tehenu. At least two such waves are well known. The Rebu swept down upon the Tehenu in the reign of Merneptah, and the Meshwesh on both the Rebu and the Tehenu in the reign of Ramses III,[43] in different attacks, which did not cease, in their efforts to settle in Egypt. It is observed that the Tehenu were always pressing towards the territories of Egypt and were the tribe with the most contact with the Egyptians in the delta. For example, the Egyptian records say: 'The lands of Temeh, Saped and Meshwesh were inhabited by robbers plundering Egypt every day.'[44] It is because of this intermingling that the Egyptians were frequently confused in distinguishing between Tehenu and Temehu. If it was intended to mean the Temehu and not the Tehenu, this may mean that the Egyptians did not consider the Tehenu on the same footing with the Meshwesh and the others.[45]

As regards features and dress, historians had their grounds to doubt that Narmer was fighting not Libyans, but Egyptians of the delta. The question with his successor Aḥa is different. Aḥa erected a temple in Sais to the goddess Neith, and married a wife perhaps from this same city, named Neith-Hotep, whose name was found on seals and sealed objects. Some of his seals bear the name 'Saisa' which refers to this city and means 'son of Isa'. The name of this king is sometimes met in the form Hur-Aḥa, written with the sign of the hawk and connected with the western desert.[46] There is no evidence that this king waged wars against the Libyans, a matter which corresponds to his supposed compassion towards the people of Sais, i.e. the Tehenu. Egyptian records attest that the Tehenu attained power and prosperity, as appears from booty gained from the Libyans, by Kha-Sechem of the IInd Dynasty, Neferkare of the IIIrd Dynasty, and Senefro, the founder of the IVth Dynasty.[47] Further investigation shows that the Libyans were gradually expanding their territory, even though the Egyptian records invariably recount the victories of the Pharaohs and show Libyan captives. The Tehenu occupied the west of the delta, the Fayyūm and reached to the south of Memphis during the Vth Dynasty, as can be deduced from the scenes in the temple of Sahure.[48]

King Sahure, who conquered the Tehenu, called their chief 'Hati Tehenu', i.e. their prince. This means that the Tehenu were not considered by the Pharaoh as complete foreigners.[49] It seems that the danger from attacks by the Asians to the east, as shown in the scenes on the tomb of Deshasheh,[50] encouraged Sahure to have diplomatic relations of a certain kind with the Tehenu. This attack from the east was so serious that it paved the way for the revolt of Unis, the last Pharaoh of the Vth Dynasty. Unis was identified with Uni, who appeared with the Libyan chief conquered by Sahure.[51] If this identification is right, the relation between the three last Pharaohs of the Vth Dynasty, Menkahur, Gedkure and Unis, becomes significant, since they neither insist on Re in their names nor build temples to him in Abusir.[52] Unis, for example, called himself 'the son of Tefnut and Hat-Hur', who were worshipped in the western parts of Egypt and parts of Libya. Unis also declared that he had won the white crown in the great country south of Libya; that he was the great Sobk of Shreet (present Fayyūm) and the son of Her-Shef, the deity of Ihnasia; and lastly that he was associated with the red-eyed Hur.[53]

It is worth noting that the texts on the pyramid of Unis not only suggest this king had a Libyan origin, but also refer to the regions said to be occupied by the Tehenu. According to these epithets and references to Unis, he was connected with the western delta, the Fayyūm, Ihnasia and Sais, which were Tehenu regions till at least —1200. It is said, therefore, that Unis was the son of the so-called blonde woman with red hair in a IVth Dynasty painting. She was thought to be a Libyan princess of a tribe living near the Fayyūm. Although some historians doubt that this woman was of Libyan origin and think that any Libyan origin in the IVth Dynasty lacks solid evidence,[54] the picture of exhausted people on Unis' walls of the road leading to his pyramid could represent Libyans who continued their attempts to settle, and succeeding in occupying the land extending between Qôs and Abydos.[55] How far such Libyans could help Unis in his revolt is a very problematical question.

Weakness and corruption during the VIth Dynasty were dramatically described by the sage Ipwwr in Papyrus Leiden 344.[56] The list of kings in Papyrus Turin, IV.7, preserved by Eratosthenes, supplies the names of certain kings and queens of particular significance, such as Neith-Eker, whom Herodotus and Manetho knew as Nitokris.[57] The list of Abydos shows that the kings of what Manetho called the VIIth Dynasty regarded the VIth Dynasty as their ancestors, but there is no proof of that claim.[58] The natural result of weakness and disorganization, which lasted for a generation, was the permanent infiltration by the Libyans of the Nile valley. The city of Heracleopolis, seat of the temple and cult of Horus, just south of the Fayyūm, restored order by triumphing over the weak Memphite VIIIth Dynasty. The Royal House at Heracleopolis maintained good relations with Siut to the extent that it became a buffer state on the south. One of the nobles of Siut became the military

commander of Middle Egypt under the Royal House of Heracleopolis,[59] which remained mighty until the supremacy of Thebes caused its collapse and the authority was transferred from north to south. Names like Nitokris may show clear inclination towards Neith, the goddess of Sais, in the Libyan centre. This inclination towards Neith may indicate an expansion of Libyan influence as a consequence of increasing Libyan infiltration into Egypt and their ability to seize power. On this understanding, the supremacy of Heracleopolis between the VIIth and IXth Dynasties was in reality a Libyan occupation of Middle Egypt.[60]

From Thebes, King Intef I, the first Pharaoh of the XIth Dynasty, pressed the Hearacleopolitans vigorously and imposed the Egyptian ways on the Libyans, forcing them to pay tribute to the king.[61] Triumph over the Rebu and Tehenu is assigned by some to Menthuhotep I,[62] by others to Menthuhotep II,[63] on the basis of the same inscription.[64] It seems that in the information about the XIth Dynasty there is sometimes confusion between the Intefs and Menthuhoteps. Besides, the struggles of these kings with the Libyans, which were commemorated along with others in Gebelen reliefs, had taken the form of raids, counter-raids and petty revolts by the Libyans settling along the Nile, as the Egyptian annalists recount.[65] So, it may be said that Menthuhotep I repelled the Libyans attacking Egypt, while Menthuhotep II waged war triumphantly with both the Egyptians in the north and south, as well as the Libyan tribes.[66] It was usual for the Egyptian kings to repeat the words of their ancestors in commemorating their victories.

Amenemhet I, the first king of the XIIth Dynasty, dispatched his son Usertesen I (Sesostris) to punish the Libyans on the western frontiers in about —1970. Diodorus Siculus recounts that Usertesen subdued a great part of Libya.[67] It is said that Usertesen I was sent to raid the land of the Rebu, and as Sinuhe[68] related, he returned with countless numbers of Libyan captives and cattle.[69] Herodotus tells us about the Libyans between Egypt and the Tritonis and that they lived on milk and flesh.[70] He also adds that they had forbidden the eating of cow's meat and the breeding of pigs, and that their women venerated Isis of Egypt.[71] This reveals the Egyptian influences on the Libyans.

The officers of Usertesen I were bent on visiting 'the land of the oasis-dwellers'.[72] Those dwellers of the oases vere Libyans and in particular the Tehenu. The officers of Usertesen I visited the oases, with bands of soldiers, in order to collect tribute, to punish rebels or to wage counter-raids. However, it seems that the main purpose of such visits to the oases was clearly the collection of tribute. Breasted observes, for example, that an officer of Usertesen III brought back 'for him the good products of Tehenu as a tribute to the greatness of his majesty's fame'.[73] It is likely that the officers of Usertesen III were collecting the tribute from the western delta or the oases,

as did the officers of Usertesen I. The oasis dwellers were certainly the Tehenu, who, together with other tribes, were under Egyptian authority and paid tribute.[74]

The position of the Libyan populations remained possibly as it is described in the Egyptian records. This means that the Tehenu were the northern-eastern neighbours of the Nile valley, the Temehu were living south of the Tehenu, and the other tribes lay westward.[75] But the weakness and disorganization which accompanied the rule of the Hyksos gave an opportunity to the Libyans to push forward into the delta and occupy rich lands. This may be the best explanation of the war between Amenhotep I and the Libyans. This Pharaoh drove the Libyans back and invaded their country,[76] as understood from the statements of his officer Amose Pen Nakhbet, according to which he slew three of the enemy and brought away three of their severed hands.[77] Those Libyans were the Imukehek who lived in the north. Maspero put their land between Mariotis and Siwa Oasis, which would imply that they were a branch of the Tehenu.

The kings of the XVIIIth Dynasty imposed Egyptian domination throughout their wide empire. Thutmose III received tribute from the various countries in Asia and Africa subject to him, from the fastnesses of Asia Minor and Mesopotamia to the distant shores of Libya and oases of the Sahara.[78] The chiefs of the Libyan tribes brought to this Pharaoh 'tributes from the southern and northern oases'.[79] This means from the Tehenu and Temehu at least. In the hymn of triumph put into the mouth of the god Amon-Re by his priests, the god enumerated his great deeds and said: 'I have come, giving thee to smite the Tehenu.'[80] It could be said that Thutmose III subdued most, or all, the Libyan tribes even beyond the oases. Various countries of the Tehenu were obliged not only to do obeisance to this king, but also to carry their tribute on their backs to the Pharaoh, in order to remain alive.[81]

Throughout the Egyptian records, the Tehenu appear as one of the most important factors in ancient Libyco-Egyptian relations. The period which began about the XVIIIth Dynasty seems to have witnessed serious changes in these relations. Most of the records continue to mention that the Egyptian king conquered the Tehenu or another tribe. Queen Hatshepsut, wife of Thutmose III, was ordered by the god to strike among the Tehenu,[82] but it is highly probable that this divine order was recorded after its fulfilment.[83] This queen claimed that her empire extended from the third cataract on the Nile to the Euphrates. She announced her frontiers, saying: 'My western boundary is as far away as the mountain of Manu [the sun-set] . . . my fame is among the sand-dwellers altogether. . . . I brought the tribute of Tehenu [Libya], consisting of ivory and seven hundred tusks which were there, numerous panther skins. . . .'[84] Though Hatshepsut spoke about boundaries, the limits of these boundaries seemed vague, as can be seen from her western

frontiers at the mountain of Manu. It is highly probable that the armies of both Thutmose II and Hatshepsut went far in every direction, and that each people had to do obeisance and pay tribute to the Pharaoh and the queen, as long as they were within their reach, 'that there might be given to them the breath of life', as Nehi, the viceroy of Kush, said about the Tehenu.[85]

It should be remembered that the oases had fallen within the administrative sphere of Egypt during the Old Kingdom. In the reign of Kamose a force was sent to the northern oasis in the campaign against Auserre Apophis. It is probable that early in the XVIIIth Dynasty central control was reasserted over all the oases. By the reign of Amenophis I there already existed a high official described as 'mayor of the oases'.[86] The Egyptian interest in the Libyan desert certainly increased until it took on more economic features in the New Kingdom and the caravan trade with and through the various oases, Siwa, Bahriya, Farfara, al Khargah, Dakhla and probably Karkur, Dungul, Nakhlai and Selima.[87]

King Amenhotep III had to wage wars with the Libyans. He conquered the Tehenu and seized captives whom he put to work on an Egyptian fortress. It was natural that the kings of the New Kingdom should reduce the Libyans to the state of partial subjection.[88]

In the time of Iknataton or his successor, the chiefs of the Nine Bows used to come to Harmhab and pay obeisance as they did to the Pharaoh.[89] This may mean that the various Libyan tribes were still under Egyptian domination. Nevertheless, desultory fighting did not cease. Ethnic pressure and infiltration by the Libyans continued into the Egyptian delta and was considered by the kings of the XIXth Dynasty as a menace.[90] Seti I, in his second year, *c.* —1312, had to send his army against the danger that threatened Egypt seriously from the west. This danger was demanding the attention of the Pharaoh and likewise at the beginning of the XVIIIth Dynasty had cost him one year of war,[91] before he could continue his operations in Asia.[92] The Libyans west of the Nile mouths never failed to seize the opportunity of lax government in Egypt to push into the delta and take possession of all the territory they could hold, and the exact western border of the delta was always more or less uncertain on their frontier. Seti I met the Libyans in a battle at some unknown point in the western delta.[93] He seems to have spent the second year of his reign in the delta and fought at least two pitched battles with the Libyans.[94] Finally, the people of 'the land of the Tehenu on their knees'[95] came before the Pharaoh, who presented them along with numerous other captives to Amon.[96] Seti obtained the usual tribute from the enemy.[97] It is quite clear that the Libyans in general, and the Tehenu in particular, were living in the time of Seti I not only in the west of the delta but in the delta itself. This clearly shows that the desert west of the delta was also occupied by the Tehenu.

The campaigns of Seti I against the Libyans did not bring the Libyan

attacks to an end. It is said that there were permanent disturbances in the west.[98] Ramses II had to counter-raid against the Libyans to the extent that he was described as 'wasting the Tehenu',[99] and letting Libya fall 'before his sword'.[100] Scenes at Beyt al-Waly and Abu-Simbel show this Pharaoh slaying Libyans, and in the first scene he is described as 'Lord of the sword, embracing the lands of Tehenu',[101] and in the second he is 'the Good God slaying the Nine Bows'.[102] One of the most fierce Libyan campaigns was the one in which the Sherden pirates were involved with the Libyans, as allies of the Tehenu, in raids on the western delta frontier. In the Tanis stele,[103] it is mentioned that Ramses II 'has captured the countries of the west . . . received their tribute. . . . The rebellious-hearted Sherden . . . ships of war are in the midst of the sea.'[104] What was happening in Libya itself by this time is not clear. It is presumed that the Sherden came to Libya and made an alliance with the Libyans to invade Egypt. There is reference to the ships of war in the midst of the sea, and this indicates a naval battle.[105] The Sherden and their allies the Libyans became a serious danger. It is highly probable that the Tanis Stele mentioned a raid that took place by the Libyan and Sherden bands who were given to plundering expeditions in the western delta.[106] This inroad seems to have taken place at the very beginning of the reign of Ramses II, who had captured these marauding bands, as related in the so-called Kadesh Poem.[107] In the second year of his reign, Ramses II had to check the continuous raids of the Libyans and their seafaring allies, the Sherden. The Aswan stele of this king says that he plundered the warriors of the sea while they were sleeping.[108] There were other attacks by the Libyans in the reign of Ramses II,[109] who won victories over them and their allies and took captives from them.[110] This king enlisted both Sherden and Libyans in his army. He settled the Tehenu on the heights and fortresses. It is said that most of his army were of those two foreign tribes.[111]

The wars or inroads that took place in the early period of the reign of Ramses II were a prelude to the following great invasions. Ramses II was becoming older and perhaps less severe, and the Libyans and the sea people freely ravaged the western delta and pressed forward to Memphis and Heliopolis. The Tehenu also pushed forward from the west of Egypt and reached the canal of Heliopolis.[112] With such movements began the great invasions of Egypt in the XIXth and XXth Dynasties. When Ramses II died, the Libyans and their allies pushed through from the west to the east of the delta with impunity.

Merneptah succeeded his father Ramses II while the marauders were extending their settlements to the gates of Memphis and crossing the southern apex of the delta very near to Heliopolis. Merneptah was advanced in years and consequently nothing was immediately done to check the incursions of the Libyans in the west. But the most serious campaign of the Libyans and

their allies that menaced Egypt took place in the fifth year of Merneptah's reign.[113] The state of affairs in this period of invasions is described in the various records of the Pharaoh.[114] The land had long been neglected because of the invaders, who repeatedly penetrated the fields of Egypt to the great river, spending many days looking for food. The northern oasis and Farafrah had for some time been cut off from Egypt. On the other side, Merneptah prepared to defend Heliopolis and to protect his people.[115]

These invaders were not the only intruders who penetrated Egypt; other Libyan tribes were also moving into the country. The Tehenu, whose territory was directly west of Egypt, were followed westwards by the Libu or Ribu, then the Meswesh. These tribes were the ancestors of the Berber tribes of North Africa.[116] It has been shown that these Libyan tribes were civilized and capable of attack. They formed a state which had a frontier about ten days' march from the Pharaoh's residence in the eastern delta. The Tehenu, in particular, used to cross the western border of the delta as far as the Canopec mouth of the Nile.[117] Some of them settled in the northern oases south of the Fayyūm. It may be said that the delta, especially the western part, was tinctured with Libyan blood and full of Libyan families. So records spoke about land in Egypt left as pasturage for cattle because of the attacks of the Nine Bows,[118] and how the kings of Upper Egypt remained in their cities because of lack of troops,[119] and how the intruders wandered in Egypt day after day searching for food.[120] This was the situation when the Libyans and their allies were about to start the great invasions in the reign of Merneptah.

The king of Lebu or Rebu, Meryey, son of Ded, forced the Tehenu to join him in his attack on Egypt. Meryey was supported by Ekwesh, Teresh, Luka, Sherden, Shekelesh and 'northerners coming from all lands'.[121] The Libyans and their allies were accompanied by their wives and children. So the scattered immigrations in the previous times this time became both an immigration and an invasion.[122] The battle between the two parties took place in the lands of the Tehenu. The Egyptians met the Libyans with their allies near a place named Perire, in the western delta.[123] Meryey and his allies together with the Tehenu were conquered by Merneptah. So the hymn of victory of Merneptah says: 'The kings are overthrown, saying, "Salam". Not one holds up his head among the nine nations of the bow. Wasted in Tehenu.'[124] It is said that Merneptah invaded the land of Temeh,[125] and secured a tribute from his enemies,[126] and that he made the Libyan camps into wastes of Red Land so that no field grew and the families of Libya scattered like mice upon the dykes.[127] Some authors suggest that Merneptah pursued the Libyans in punitive expeditions. But there is no evidence that this Pharaoh sent more than small bodies of troops to drive the enemy beyond the western frontiers.[128]

Merneptah's victory was a profound relief to the Egyptians.[129] Had Egypt not fallen into confusion because of its weakness after the death of Merneptah,

his victory would have been effective in hindering Libyan attacks against Egypt for a long time. But the military spirit declined and the scribes became revered.[130] Such a situation emboldened the Libyans to invade the Nile valley again. They came in plundering bands wandering over the delta from Memphis to the Mediterranean. They took possession of fields and settled on the Canopic branch of the Nile.[131] This state of confusion prevailed between the death of Merneptah in —1215 and the accession of the energetic Setnakht (*c.* —1200) who subdued the invaders and restored order. This king died shortly afterwards and was succeeded by his son Ramses III.

It is worth noting that Sherden mercenaries formed a considerable proportion of the army of Ramses III. There was also a contingent of the Kehek in the Egyptian army. Moreover, Libyans and Meshwesh who were in Egypt at this time plundered the cities of the western shore.[132] But events in Asia and Europe spurred the Libyans to attempt to invade and devastate Egypt again.[133] Other maritime peoples, the Thekel and Pelest, could not withstand the pressure behind them; nor could the Libyans.[134]

The sea people, who had been near the Egyptian coasts along the delta on plundering expeditions,[135] fell in with the Libyans' plans to invade the delta. This was the first invasion under Themer, who crossed the border of Egypt from Libya,[136] in the reign of Ramses III and it is known as the first Libyan war. It is understood that the Libyans advanced from the west, while their allies the sea people proceeded into the western delta. The fact that the sea people accepted the presidency of the Libyan chief is significant. This Libyan chief was certainly more acquainted with the desert. But it is uncertain whether he also led the European invasions in Asia. Moreover, the significance of the Libyan supremacy, if it really existed, is vague. To what extent the Libyan tribes were more powerful and organized or civilized than the sea people is not clear. Such questions call for more excavations and investigations on Libyan soil. Ramses III conquered the invaders, and was called 'the chastiser of the Libyans'.[137]

As far as our interest goes, an important change occurred concerning the Tehenu. It happened from the end of the XVIIIth Dynasty onwards. Records of Ramses II bear many references to the Tehenu such as 'wasting the Tehenu',[138] 'embracing the lands of Tehenu',[139] etc. Until the reign of Ramses II, the Tehenu were the principal or the strongest power that brought disturbances from the west to the Egyptian administration, and this is reflected in the Egyptian records. They were the first Libyan group mentioned in the Tanis stele as the allies of the Sherden, the first foreign people to be recorded in the Egyptian documents in an invasion against Ramses II.[140] They may also have been the allies of the Sherden in an invasion in which a reference was made to warships, indicating a naval battle in connection with the war.[141] The so-called Kadesh Poem also shows this alliance between the Sherden and the

Tehenu, whom Ramses II 'has taken by might'.[142] The Aswan stele of Ramses II and other records of the reign of this king show that the Tehenu were always his main Libyan enemy.[143] It is also mentioned that Ramses II, at the end of the land and sea war, enlisted the Sherden in his army and settled the Tehenu on the heights.[144] It is assumed that other Libyan groups participated in these fights, but possibly under the leadership of the Tehenu.

The Tehenu began to lose the position of leadership to other Libyan groups during the reign of Meryey, king of the Libyans, who made an alliance with the sea people and forced the Tehenu to join him in his invasion of Egypt in the reign of Merneptah.[145] Although Merneptah's hymn of victory talks of victories which Merneptah had achieved among the Tehenu,[146] it is clear that the Rebu now became the leading group. This is probably the reason why the Egyptian records use the name 'Tehenu' either when they mean the Tehenu group or the land of the Tehenu, or Libya. When the Rebu or Lebu took over the leadership, their name possibly began to denote, for the Egyptians, the whole of Libya.

Further changes in the status of the Tehenu took place when the Meshwesh began to play an active role in the XXth Dynasty. In the first Libyan war of Ramses III, the Meshwesh appeared for the first time among the Libyan invaders as allies of the Rebu. The Meshwesh took advantage of the weakness of their eastern neighbours, the Rebu and Tehenu respectively, after their defeat by Ramses III. So, the leader of the Meshwesh, Meshesher, son of Kepper, 'invaded the Tehenu, who were made ashes, despoiled and desolated were their cities, their seed was not'.[147] Bates rightly suggests that the Rebu also, suffered a similar fate, since they were the immediate neighbours of the Meshwesh on the east.[148] The fact that the Egyptian document only mentioned the Tehenu in this incident supports the point of view that the 'Tehenu' was the most familiar name to Egyptians for the Libyan groups. The Tehenu, though not completely finished, suffered from the successive attacks by the Rebu and the Meshwesh. The vanquished Tehenu and Rebu advised the Meshwesh to invade Egypt, and when they were conquered by the Egyptians, the Meshwesh said 'Libya has misled us. . . .'[149] This advice was almost certainly a cunning plan of the Rebu to rid themselves of these new masters. When the Meshwesh were conquered, this meant that the Rebu became the strongest of the group of the allies and meant they gave their name to the whole country, Libya.

The second Libyan war of Ramses III took place in the eleventh year of his reign. The Temehu came together in Libya and assembled with the Rebu, Meshwesh and Seped.[150] They all, together with the sea people, united with the Libyans already settled in the delta, and began plundering by land and sea.[151] Some of the invaders remained on their ships trying to go southwards through the Canopic branch of the Nile, and began sacking the towns of the western

delta from Kerben, south of Memphis onwards.[152] The invaders seem to have considered that their objective was accomplished and began settling in Egypt like the colonists. They were, nevertheless, finally defeated by Ramses III, who is reported to have boasted: 'I overthrew those who invaded my boundary, prostrated in their place. . . . I laid low the land of the Temeh. . . . The Meshwesh, they crouch down for fear of me.'[153] It seems that Ramses III did not permit even the remnants of the invaders to live in peace on their lands.

The invaders apparently had to pass through the lands of the Tehenu while encroaching on the Egyptian boundaries. But the documents recording the wars of Ramses III against the Meshwesh and their allies do not mention the Tehenu. According to these records, a confederation was formed comprising five tribes, the Esbet, Shai, Beken, Keykesh and Hes, who are mentioned as the allies, but the Rebu and Tehenu are not, although they undoubtedly participated in the war. Only the Meshwesh appear on the Egyptian list of captives, perhaps owing to the application by the Egyptian scribes of the name of the contingent dominant among the allies, rather than to a defection of the non-Meshwesh allies in the battle of Hatsho,[154] which was the end of the armed migrations towards Egypt. The participation of the Tehenu in these invasions may be attested by the fact that Queen Hatshepsut levied tribute on the Tehenu.[155]

After the victory of Ramses III over the Meshwesh led by Kepper, the Egyptian records fall silent about any mention of the sea people. When the king commemorated his victory, he established an annual festival called 'Slaying the Meshwesh'.[156] The Libyans, sure of their inability to face the Egyptian army, began a peaceful conquest by permanent infiltration into the delta. They filled the ranks of the army, and became commanders of the fortresses and garrisons in the delta, and gained positions of power and influence. It seems that the Tehenu were the most successful in drifting eastwards and becoming concentrated in the delta and Middle Egypt. This appears from the fact that the family of one of the Tehenu Libyans attained priestly and military powers in Heracleopolis. Finally, a member of this family, which was completely Egyptianized, became the founder of the Libyan XXIInd Dynasty in Egypt.[157] By the end of the first millennium before our era, both the migration of small groups and their settling in the east of the Mediterranean and North Africa and the pressure of the large masses driven from southern Europe to North Africa, pushing marauders into Egypt, came to an end.[158]

The question which calls for more investigation is the relation between the Adyrmachidae who, according to Herodotus,[159] as well as part of the Giligames, settled in the land previously inhabited by the Tehenu. Herodotus tells us that the customs of the Adyrmachidae were similar to those of the Egyptians, but their dress was like that of the other Libyans. This description is almost that of the Tehenu. When did the Adyrmachidae replace the Tehenu?

Did the Tehenu depart for Egypt and become Egyptians and did the Adyrmachidae appear as the result of migrations? This in fact calls for reconsideration of the distribution of the old tribes and their origins, especially after the measures taken by Ramses III and his successors.[160]

Notes

1. J. H. Breasted, *Ancient Records of Egypt*, Vol. II, p. 321, Chicago, University of Chicago Press, 1906.
2. Ibid., Vol. IV, p. 106; O. Bates, *The Eastern Libyans*, p. 48, London, Macmillan, 1914.
3. J. H. Breasted, *A History of Egypt from the Earliest Times to the Persian Conquest*, p. 7, Darby, Pa., Darby Books, 1983. (Reprint of 1916 edition.)
4. W. Arkel, *The British Ennedi Expedition*, pp. 44 ff., 1951.
5. Breasted, *Ancient Records* . . ., op. cit., Vol. I, p. 675.
6. For 'the first appearance of Negroes in history' see article by H. Junker in the *Journal of Egyptian Archaeology* (London), 1921; F. Chamoux, *Cyrène sous la monarchie des Battiades*, pp. 42 f., Paris, 1953.
7. A. Zethe, *Zeitschrift für Aegyptische Sprache und Alterumkunde*, Vol. LII, p. 56; W. M. F. Petrie, *Ceremonial Slate Palettes*, London, 1933; A. H. Gardiner, *Onomastica*, p. 396.
8. G. Galassi, *Tehenu e le origini mediterrani della civiltà egizia*, p. 33, Rome, 1942; Breasted, *Ancient Records* . . ., op. cit., Vol. III, p. 579.
9. L. Borchardt, *Das Grabdenkmal des Königs Sahure*, Vol. I, Figs. 11, 12.
10. Breasted, *Ancient Records* . . ., op. cit., Vol. III, pp. 584–9.
11. P. E. Newberry, *Beni Hasan*, Vol. I, Pl. XLVII; Bates, op. cit., pp. 95 f.
12. Homer, *Odyssey*, IV.85 f.
13. Borchardt, op. cit., p. 17.
14. Breasted, *Ancient Records* . . ., op. cit., Vol. II, pp. 385–6.
15. Ibid., p. 321.
16. Ibid., pp. 763, 767.
17. Ibid., Vol. I, p. 527.
18. I. Dümichen, *Die Oasen der Libyschen Wüste;* G. Parthey, *Der Orakel und die Oasen des Ammon;* Bates, op. cit., p. 48.
19. Breasted, *Ancient Records* . . ., op. cit., Vol. IV, pp. 650 ff.
20. Ibid., p. 725; Ptolemy, *Geographia*, IV.
21. Breasted, *History of Egypt* . . ., op. cit., pp. 31 f.
22. In the records of the genealogy of Harpeson, whose origin is from a family of Libyan settlers in the Egyptian delta, are to be found eleven names of men and their wives. Under Egyptian influence, all the men of this family appear to be monogamous (Breasted, *Ancient Records* . . ., op. cit., Vol. IV, p. 787; Bates, op. cit., p. 109).
23. H. Kees, *Ancient Egypt; A Cultural Topography*, p. 28, Chicago, University of Chicago Press, 1978.
24. Herodotus, IV.198.
25. Ibid., 199.
26. Lucan, IV.334.
27. Bates, op. cit., p. 98.
28. Kees, op. cit., pp. 30 f.

29. Bates, op. cit., p. 188.
30. Al-Bakrī, *Description de l'Afrique septentrionale*, p. 12.
31. Breasted, *History of Egypt* . . ., op. cit., pp. 31 f.
32. V. Vikentieve, in *Journal of Egyptian Archaeology*, Vol. 17, 1931. pp. 67–80.
33. See the slate palette commemorating the victory, in J. E. Quibell, *Hieraconpolis*, Vol. I, p. 29.
34. Breasted, *History of Egypt* . . ., op. cit., p. 47.
35. Quibell, op. cit., Pl. XV, No. 7; Breasted, *History of Egypt* . . ., op. cit., p. 49.
36. *C.A.H.*, Vol. II, Part 1, 1973, p. 310.
37. Breasted, *History of Egypt* . . ., op. cit., pp 47, 49; Bates, op. cit., p. 210; E. Drioton and J. Vandier, *L'Égypte*, p. 135; A. Moret, *Le Nil et la civilisation égyptienne*, pp. 172 f., 1926.
38. A. H. Gardiner, *Egypt of the Pharaohs*, pp. 116 ff., New York, Oxford University Press, 1964.
39. Chamoux, op. cit., pp. 41 ff.
40. H. R. Hall, *The Oldest Civilization of Greece*, pp. 171 ff.; W. W. Muller, *Asien und Europa*, pp. 371 ff.; Bates, op. cit., p. 216.
41. G. Maspero, *The Struggle of the Nations*, p. 767; L. Heuzey, *Tribus asiatiques en expédition*, Pl. IV and V.
42. Quibell, op. cit., Part 1, Pl. XIX, Fig. 1, Part II, Pl. XXVIII; Bates, op. cit., pp. 93 f.
43. Cf. Bates, op. cit., p. 44, Map 1, p. 51, Map 2; Breasted, *Ancient Records* . . ., op. cit., Vol. III, p. 579, may be the earliest mention of the attack of the Rebu on Tehenu.
44. Ibid., pp. 569–70; Vol. IV, pp. 40, 52.
45. Cf. W. M. F. Petrie, *The History of Egypt*, Vol. III, p. 108; Breasted, *History of Egypt*..., op. cit., pp. 447 ff.; Maspero, op. cit., p. 456; Bates, op. cit., p. 220.
46. W. M. F. Petrie and F. L. Griffith, *The Royal Tombs of the Earliest Dynasties*, Vol. II, Pl. X, 2, Vol. XI, 1-2, London, Egypt Exploration Society, 1901; W. B. Emery, *Hor-Aha*, Figs. 13, 19; Gardiner, *Egypt of the Pharaohs*, op. cit., pp. 411 f; Drioton and Vandier, op. cit., pp. 135 ff.; De Morgan, *Recherches*, p. 168, Fig. 558.
47. Gardiner, *Egypt of the Pharaohs*, op. cit., p. 418; Bates, op. cit., pp. 210 f.; Drioton and Vandier, op. cit., pp. 195 ff.; A. Fakhry, *The Monuments of Senefro at Dahshur*, Cairo, 1959–61.
48. Borchardt, op. cit., Vol. I, pp. 17 f.; Bates, op. cit., p. 211.
49. Borchardt, op. cit., Vol. II, Table 1; J. Spiegel, *Das Werden der alt. Aegyptischen Hoch Kultur*, p. 820.
50. W. M. F. Petrie, *Deshasheh*, Pl. IV.
51. Spiegel, op. cit.; Gauthier, *Le Livre des Rois d'Égypte*, pp. 130 f.
52. J. H. Breasted, *The Development of Religion and Thought in Ancient Egypt*, London, 1912; *The Dawn of Conscience*, New York, Scribner, 1933.
53. Spiegel, op. cit., pp. 773 f., 822 f. The red-eyed Hur may be compared to the Red Crown of Sahure and the 'Red House' and other signs of the North Kingdom which are of Libyan origin. See Breasted, *History of Egypt* . . ., op. cit., pp. 31–2.
54. W. S. Smith, *A History of Egyptian Sculpture and Painting*, p. 143, 1949; G. A. Reisner, 'The Tomb of Hetep-herès, the Mother of Cheops', *A History of the Giza Necropolis*, Vol. II, 1942–55; neither authors see the woman's hair as necessarily blonde.
55. E. Drioton, 'Une représentation de la femme', *Bulletin de l'Institut d'Égypte*, Vol. XXV, 1942, pp. 45 ff.
56. A. H. Gardiner, *The Admonitions of an Egyptian Sage*, Leipzig, 1909.
57. Herodotus, II.100; P. E. Newberry in *Journal of Egyptian Archaeology*, 1943, pp. 51 f.; Gardiner, *Egypt of the Pharaohs*, op. cit., p. 102; Bates, op. cit., pp. 203 ff.
58. Breasted, *History of Egypt* . . ., op. cit., p. 147.

59. Breasted, *Ancient Records* . . ., op. cit., Vol. I, pp. 490, *History of Egypt* . . ., op. cit., pp. 147 ff.
60. Breasted, *Ancient Records* . . ., op. cit., Vol. I, pp. 398, 403.
61. P. E. Newberry, *On the Parentage of Intef, King of the Eleventh Dynasty*, 1936; W. C. Heyes, *The Sceptre of Egypt*, p. 152, 1935; H. Stock, in *Mitt. Kairo*, Vol. XIV, pp. 44 f.
62. Bates, op. cit., p. 212.
63. Breasted, *History of Egypt* . . ., op. cit., p. 151.
64. Breasted, *Ancient Records* . . ., op. cit., Vol. I, p. 423.
65. Bates, op. cit., p. 212.
66. Breasted, *History of Egypt* . . ., op. cit., p. 151.
67. Diodorus Siculus, I.53.
68. A. H. Gardiner, *Notes on the Story of Sinuhe*, pp. 8 ff., ANET.
69. Breasted, *Ancient Records* . . ., op. cit., Vol. I, p. 492; Bates, op. cit., p. 218.
70. Herodotus, IV.186.
71. Kees, op. cit., p. 31.
72. Breasted, *Ancient Records* . . ., op. cit., Vol. I, p. 527, *History of Egypt* . . ., op. cit., p. 179.
73. Breasted, *Ancient Records* . . ., op. cit., Vol. I, p. 675.
74. Bates, op. cit., p. 212.
75. Ibid., p. 50, Map II.
76. J. Maspero (*Les contes populaires de l'Égypte ancienne*, Paris, 1882) believes that the Imukehek were living between Mariotis and Siwa Oasis in the west of the delta. This means that this tribe was included in the Tehenu group.
77. Breasted, *Ancient Records* . . ., op. cit., pp. 22, 42, *History of Egypt* . . ., op. cit., p. 254.
78. Breasted, *History of Egypt* . . ., op. cit., p. 320.
79. Breasted, *Ancient Records* . . ., op. cit., Vol. II, 385 ff.; Bates, op. cit., p. 213.
80. Breasted, *Ancient Records* . . ., op. cit., Vol. II, pp. 655 ff.; *History of Egypt* . . ., op. cit., pp. 318 f.
81. Breasted, *Ancient Records* . . ., op. cit., Vol. II, p. 413, *History of Egypt* . . ., op. cit., p. 289; Bates, op. cit., p. 213.
82. Breasted, *Ancient Records* . . ., op. cit., Vol. III, p. 225.
83. Bates, *op. cit.*, p. 213.
84. Breasted, *Ancient Records* . . ., op. cit., Vol. II, p. 321, *History of Egypt* . . ., op. cit., p. 280; Bates, op. cit., p. 213.
85. Breasted, *Ancient Records* . . ., op. cit., Vol. II, p. 225, 809; *History of Egypt* . . ., op. cit., p. 324.
86. *C.A.H.*, Vol. II, No. 1, pp. 310–11.
87. Ibid., p. 387.
88. Breasted, *Ancient Records* . . ., op. cit., Vol. II, p. 892.
89. Breasted, *History of Egypt* . . ., op. cit., p. 400.
90. Breasted, *Ancient Records* . . ., op. cit., Vol. III, p. 121.
91. Ibid., p. 82.
92. *Ibid.*, p. 135; Breasted, *History of Egypt* . . ., op. cit., pp. 411 f.
93. Breasted, *Ancient Records* . . ., op. cit., Vol. III, pp. 120–32.
94. Ibid., pp. 133–9.
95. Ibid., p. 147.
96. Ibid., pp. 134 ff.
97. Ibid., pp. 137 ff.; Bates, op. cit., p. 213.
98. Breasted, *Ancient Records* . . ., op. cit., Vol. III, 448.
99. Ibid.

100. Ibid.
101. Ibid., p. 464.
102. Ibid., p. 457; Gardiner, *Egypt of the Pharaohs*, op. cit., pp. 270 ff.
103. Breasted, *Ancient Records* . . ., op. cit., Vol. III, p. 491; Bates, op. cit., p. 214.
104. For the first time the Sherden appeared in history, see Breasted, *History of Egypt* . . ., op. cit., pp. 424 f.
105. Breasted, *Ancient Records* . . ., op. cit., Vol. III, p. 488; G. Bonfante, in *American Journal of Archaeology*, Vol. L, 1946, pp. 281 ff.
106. Breasted, *Ancient Records* . . ., op. cit., Vol. III, p. 491; *History of Egypt* . . ., op. cit., pp. 424 f.
107. *Anastasi Papyrus*, II, v, 1–2; Bates, op. cit., p. 215.
108. Breasted (*Ancient Records* . . ., op. cit., Vol. III, p. 479) noticed that the Libyans in this battle were the Tehenu. Cf. Petrie, *History of Egypt*, op. cit., Vol. III, p. 46.
109. Bates, op. cit., p. 215, note 6.
110. Breasted, *Ancient Records* . . ., op. cit., Vol. III, p. 307, *History of Egypt* . . ., op. cit., pp. 449 f.
111. Bates, op. cit., p. 215; Gardiner, *Egypt of the Pharaohs*, op. cit., pp. 270 ff.
112. Breasted, *History of Egypt* . . ., op. cit., pp. 462 ff, *Ancient Records* . . ., op. cit., Vol. III, p. 576.
113. Ibid., pp. 569–70.
114. W. Hölscher, *Libyer und Aegypter*, pp. 50 ff., Hamburg, 1937.
115. Breasted, *Ancient Records* . . ., op. cit., Vol. III, pp. 576–80.
116. Herodotus, IV.168 ff.; Chamoux, op. cit., pp. 53, 58.
117. For more information about the Libyan tribes and their localities, see Bates, op. cit., p. 51, and Chamoux, op. cit., pp. 47 ff., 55 ff.
118. Breasted, *Ancient Records* . . ., op. cit., Vol. III, p. 577.
119. The intruders could spend months in Egypt with impunity. See ibid., p. 580.
120. Ibid., pp. 580, 585.
121. Bates, op. cit., p. 216; Breasted, *Ancient Records* . . ., op. cit., Vol. III, pp. 574, 579; Hall, op. cit., pp. 171 ff.; Muller, op. cit., pp. 371 ff.
122. Breasted, *History of Egypt* . . ., op. cit., pp. 467 ff.
123. For the locality of the battle, see Bates, op. cit., p. 217, note 1.
124. Breasted, *Ancient Records* . . ., op. cit., Vol. III, pp. 616–17, *History of Egypt* . . ., op. cit., p. 470.
125. Breasted, *Ancient Records* . . ., op. cit., Vol. III, p. 608.
126. Ibid., p. 541.
127. Ibid., p. 598; Breasted, *History of Egypt* . . ., op. cit., pp. 469 ff.
128. Bates, op. cit., p. 219; Breasted, *Ancient Records* . . ., op. cit., Vol. III, p. 584. *History of Egypt* . . ., op. cit., p. 468.
129. Breasted, *Ancient Records* . . ., op. cit., Vol. III, p. 611.
130. See *Anastasi Papyrus*, III, Pl. V, 1.5, VI, 1.2, IV, IX, 1.4; Maspero, op. cit., pp. 457 f.; A. Erman, *Aegypten und Aegyptisches Leben*, p. 722, 'Hieratische Ostraka', *Zeitschrift für Aegyptische Sprache*, pp. 96 f; Bates, op. cit., p. 219.
131. Breasted, *Ancient Records* . . ., op. cit., Vol. IV, p. 405, *History of Egypt* . . ., op. cit., pp. 474 f.
132. Breasted, *Ancient Records* . . ., op. cit., Vol. IV, p. 402.
133. Breasted, *History of Egypt* . . ., op. cit., pp. 477 f.
134. Gardiner, *Egypt of the Pharaohs*, op. cit., pp. 270 ff., 284.
135. Breasted, *Ancient Records* . . ., op. cit., Vol. IV, p. 44; M. Pallotino, *The Etruscans*, p. 56, Harmondsworth, Pelican Books.
136. Ibid., p. 43; cf. Maspero, op. cit., p. 456.

137. Breasted, *Ancient Records . . .*, op. cit., Vol. IV, p. 52, *History of Egypt . . .*, op. cit., pp. 477 f.
138. Breasted, *Ancient Records . . .*, op. cit., Vol. III, p. 448.
139. Ibid., p. 464.
140. Ibid., p. 491; Bates, op. cit., p 214
141. Breasted, *Ancient Records . . .*, op. cit., Vol. III, p. 488.
142. *Anastasi Papyrus*, II, V, 1–2.
143. Breasted, *Ancient Records . . .*, op. cit., Vol. III, p. 479; Bates, op. cit., p. 215 and note 2.
144. Breasted, *Ancient Records . . .*, op. cit., Vol. III, pp. 307, 457.
145. Breasted, *History of Egypt . . .*, op. cit., p. 467.
146. Breasted, *Ancient Records . . .*, op. cit., Vol. III, pp. 616–17, *History of Egypt . . .*, op. cit., p. 470.
147. Breasted, *Ancient Records . . .*, op. cit., Vol. IV, p. 87.
148. Bates, op. cit., p. 223, note 4.
149. Breasted, *Ancient Records . . .*, op. cit., Vol. IV, p. 91.
150. Ibid., p. 40; Bonfante, op. cit., pp. 251 ff.
151. See also ibid., p. 44 ; cf. Muller, op. cit., p. 360. For the origin of the maritime people who attacked West Asia, Egypt and North Africa, and the questions raised by this problem, see: S. R. K. Glanville (ed.), *The Legacy of Egypt*, pp. 40 f., London, Greenwood Press, 1977; A. J. Wilson, *The Burden of Egypt*, pp. 244 ff., 1951; G. A. W. Wright, in *Journal of Egyptian Archaeology*, Vol. XXV, 1939, pp. 148 ff.; Gardiner, *Egypt of the Pharaohs*, op. cit., pp. 270 ff.
152. Kerben, a site near Abukir, see H. Brugsch, *Dictionnaire géographique*, p. 854.
153. Breasted, *Ancient Records . . .*, op. cit., Vol. IV, pp 42, 54, 58.
154. Ibid., p. 405; Bates, op. cit., p. 224, note 9.
155. W. E. Muller, *Egyptological Researches*, Vol. II, p. 135.
156. Breasted, *Ancient Records . . .*, op. cit., Vol. IV, p. 145; Herodotus, IV.191. The question of the ravage of the Rebu and Tehenu by the Meshwesh, and the latter's control of the other Libyans, especially at the time of the appearance of the maritime peoples, is problematic. Herodotus refers to the Trojan origin of the Meshwesh. Cf. C. S. Coon (ed.), *The Races of Europe*, pp. 464 f., London, Greenwood Press, 1972; Gardiner, *Egypt of the Pharaohs*, op. cit., p. 259; Bates, op. cit., p. 226.
157. Breasted, *History of Egypt . . .*, op. cit., pp. 526–7, 533, 568; Bates, op. cit., pp. 227 f.
158. J. Deniker, *The Races of Man*, pp. 315 ff., 321; Bates, op. cit., p. 226.
159. Herodotus, IV.168, 169; Bates, op. cit., p. 51, note 10.
160. Breasted, *Ancient Records . . .*, op. cit., Vol. IV, p. 726; Strabo, XVII.1.5; Bates, op. cit., p. 229.

Formation of the Berber branch

Cheikh Anta Diop

The prehistoric period

The Berbers living in North Africa and the Sahara today are largely descended from the peoples who attempted to invade Egypt *c.* —1200, and who are referred to in Egyptian texts under the generic term 'peoples from the sea'.

They are not directly descended from a Palaeo-African Ibero-Maurusian stock, as was long believed. In fact, the Ibero-Maurusian culture belongs to the final Palaeolithic and the Epipalaeolithic. This culture extended at most from —10,000 to —6000, thus leaving a gap of 5,000 years to be filled between the final phase and the arrival in Africa of the sea peoples. In fact, the Mechta el-Arbi people, who embodied this culture, not only varied considerably in physical type but became extinct some 10,000 years ago. They have no demonstrable connection with the Guanches of the Canary Islands, with whom they are sometimes compared. The latter, exterminated by the Spaniards in the sixteenth century, were protohistoric peoples who were permeated to some extent by Punic influence and who practised mummification. According to some current research trends, the Ibero-Maurusian would even appear to have come from the south, from the Sudan region or from Kenya.

The historical period

The chronological frame of reference here is provided by Egypt, for until the fifth century before our era the people in question were still at the stage of being subjects for ethnographic study, as shown by the observations of Herodotus in his Book II, *Euterpe*.

Already under the Old Kingdom, some proto-Libyans from an initial infiltration were ranging the Libyan desert. However, the great historical contact occurred under the XIXth Dynasty (—1300). Evidence is to be found in representations on Horemheb's tomb, Luxor, Medinet Abu, etc.

The Pharaohs living at the time of this invasion, which they had to contain, were Merneptah, Ramses II's fourth son, and Ramses III.

The end of Ramses II's reign and the beginning of that of Merneptah coincided with the first great invasions of the peoples from the north, who were to transform the ethnic physiognomy of the whole of western Asia. Egypt owed its salvation to its technical superiority alone. These same peoples were dislodged from their respective territories (southern Europe and Asia Minor) by the sudden thrust of the Dorians. For example, in about —1230, led by the Libyan chieftain Meryey, a coalition of Achaeans, Sicels (Sicily), Shardanes (Sardinia), Lycians and Etruscans set out to attack Egypt west of the delta. They were defeated by Merneptah after a battle that lasted six hours. Meryey fled, abandoning his weapons, his treasure and his harem. On the battlefield the number of slain included 6,359 Libyans, 222 Sicels, 742 Etruscans and thousands of Shardanes and Achaeans. More than 9,000 swords and coats of arms were seized and considerable spoils. Merneptah had a hymn of victory engraved in his funerary temple in Thebes, describing the consternation of his enemies.

Sethnakht founded the XXth dynasty (—1200), and after two years' reign was obliged to give way to his son Ramses III, who was immediately confronted with another coalition of the sea peoples, this time attacking by land and by sea. In the new coalition there were Philistines, and again some Sicels, Shagalasha, Danaeans and Washasha. It was the largest coalition of peoples in ancient times. It pitched camp in the country of Amurru in the north of Syria. As fate would have it, the Hittite nation was annihilated during this second invasion. The town of Ugarit in the north of Syria was destroyed. Cyprus, Carchemish and Arvad were occupied and turned into bases for the invasion of Egypt by land and sea.

However, the Egyptian army with its superior organization won a two-fold victory over the coalition, both on land and at sea. The coalition's fleet was completely destroyed in the mouths of the Nile and the invaders' overland route to the delta was cut off.

Simultaneously, however, a third coalition was being formed in Libya against Egypt—for the second time. It was immediately annihilated by Ramses III. He had previously tried to set up as chief of the Libyan community one of its young princes, who had been raised at the Egyptian court as a hostage, in accordance with the policy followed by Egypt from the XVIIIth Dynasty onwards, which was to assimilate the future heads of vassal states. After this third victory, Ramses III took an exceptional number of prisoners.

Ramses III fought a defensive war in Phoenicia, which was then an integral part of the Egyptian Empire. He commanded the Egyptian fleet in person and defeated the fourth coalition of the sea peoples. The entire fleet of the Philistines was sunk, so that they could not take to sea again. A whole people, the Philistines, was thus taken captive and settled by Ramses III in

Palestine, or 'Palestiou' as it was called in the Egyptian texts, being named after that people. The sea peoples were definitively scattered after this defeat.

Meanwhile, the Libyans in the western region of the delta were building up the third Libyan coalition, which was to be the fifth against Ramses III. They were defeated by him in —1188, before Memphis. Henceforward, the Libyans were never again to rise against Egypt. They infiltrated Egypt peacefully, and even served in the army as an auxiliary corps.

The Berbers are the direct descendants of these ancient Libyans, or sea peoples, who arrived in Africa in about —1200. They took 750 years to spread from the west of the Nile delta as far as the Atlantic Ocean.

In —450, when Herodotus visited Egypt under Persian domination, the Libyans were still at the stage of organization in nomadic tribes, as studied by ethnographers. According to Herodotus, they were scattered around Lake Triton in Cyrenaica and had spread as far as the suburbs of Carthage. A traveller from Egypt to the Atlantic Ocean would have come across them in the following order:

First the Adyrmachidae: their manners and customs were influenced by prolonged contact with Egypt. Then there were the Giligames, who occupied territory extending as far as the Island of Aphrodite. After them were the Asbytes, who lived above Cyrene, in the hinterland, separated from the sea by the Cyrenians. They travelled in chariots drawn by four horses. Next came the Auschises, who lived above Barḳa and owned a fraction of the coast in the vicinity of the Hesperides. The Bakales were located in the middle of their territory. Then there were the Nasamonians, whose custom it was for men to have several wives. However, they shared their wives, much as the Massagetae men did. According to Herodotus, a group of young Nasamonians succeeded in crossing the Sahara obliquely, towards the Niger bend perhaps. At all events, the members of the expedition are said to have arrived in Africa south of the Sahara, on the banks of a river inhabited by crocodiles, where the population were pygmies or similar to pygmies.

After the Nasamonians, our traveller would have encountered the Psylls, who were annihilated in mysterious circumstances, according to Herodotus—perhaps as a result of some natural phenomenon such as a sandstorm. Beyond the Nasamonians, further south, he would have encountered the Gamphasants or Garamantes, 'who flee all men and all society, possess no weapons and do not know how to defend themselves'. Let it be said in passing that this account by a contemporary historian is hard to reconcile with the idea of a warlike people imposing Mediterranean civilization as they travelled southwards.

Then there were the Macae, settled along the coast, and, after them, the Gindanes, who lived near the Lotophagi, followed by the Machlyes, whose

settlements extended as far as the River Triton, flowing into Lake Triton. Herodotus also mentions the Auses, to whom marriage was unknown: the men shared the women.[1]

Such were the different tribes in ancient times that were gradually to organize themselves into kingdoms throughout northern Africa: (a) the kingdom of Mauretania in the north-west corner of the continent, after the conquest of the Gaetulians; and (b) the kingdom of Numidia, which flourished in the time of Massimissa and which stopped at Tripoli, and eastern Libya, in which the Greek colony of Cyrene lived in an enclave, founded in the seventh century (—630) by the inhabitants of Thera Island in the Cyclades, following a long drought that led to a food shortage. Four other colonies were added to this one to form what was called the 'pentapolis', or five cities.

On the west coast, the Phoenician colonies of the Tyre period apparently date back to the twelfth century before our era, following the Dorian invasions which caused disruption in the whole eastern basin of the Mediterranean.

The earliest stratum of the Libyan population was a black population from the south Sahara, as is being confirmed by archaeology. This region was referred to as Tehenu or Libu in Pharaonic texts. These two roots are evident in present-day Senegalese languages such as Wolof. The population of Cape Verde, that is, of the Dakar region, still forms the Libu ethnic group, which includes the Libu subgroup: *khonkh bop*, or white Libu, an expression that refers back to the period preceding the Libu migration.

Note

1. The promiscuity of the Nasamonians, the Massagetae and the Auses related by Herodotus was turned to considerable account by Engels to support his theory concerning primitive communism (F. Engels, *The Origin of the Family, Private Property and the State*, London, Lawrence & Wishart, 1972). Engels also cites the Tikours north of the Ganges in India.

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The Berber migrations to North Africa

M. El Fasi

The Berbers who inhabited the whole of North Africa from the western Nile region in Egypt to the Atlantic Ocean are a Semitic people whose origins are disputed. Arab and Berber genealogists agree that the Berbers came to Africa from the Arabian peninsula, but they differ as to the exact place from which they migrated to settle in the Maghrib regions. Some say they came from Palestine, others from Yemen. Other historians think that the Sanhaya tribes are Himiarites from Yemen, like the Kutāma. These two major North African confederations account for the bulk of the Berbers. Those who support this theory—Ṭabarī, whose major historical work is being published in French in Paris, al-Mas 'ūdī, as-Suhaylī and all the Arab genealogists—maintain that the other tribes came from Syria and that it was King David who expelled them from Palestine.

None of these theories is backed by irrefutable scientific evidence, but the fact that recent linguistic studies have shown that the Berber language is undoubtedly a Semitic language suggests the Arabian origin of this people whom the Arabs have called *'bar-bar'* (بر بر), which is quite unconnected with any idea of savagery. For 'barbarian' is a term the ancient Greeks gave to the European peoples who did not speak Greek. The word thus acquired the meaning of 'savage' which it did not have in Greek. Likewise the Arabs arriving in the Maghrib found populations jabbering, as it seemed to them, in an incomprehensible language. To describe this phenomenon, they spoke of them as 'barbaring', if I may coin such a term, which in classical Arabic means to emit sounds which are devoid of sense. They even went so far as to use a word that originally meant 'chatter' in referring to their speech, with the result that spoken Moroccan Arabic uses this very word today for 'speak'.

The Berbers themselves call themselves *Imazighen*, which is the plural of *amazigh* and means free. This follows a general trend in many peoples, which either regarded themselves as free and the others as slaves—e.g. the Franks in relation to the Slavs—or considered themselves to be eloquent and others mute—as in the case of the Arabs—namely those whose language is clear and those who are the 'Ajam, that is, who are like animals and cannot speak

(*'ajmâwàt*). This fits in exactly with what we have said of the Greeks, who considered all those who did not speak Greek to be barbarians, that is, people who babble and whose speech is merely 'blablabla' (*bar-bar*).

Examples of this egocentric attitude on the part of all peoples abound.

To come back to the migrations of the Berbers from the Arabian peninsula, yet another theory is put forward by the great Andalusian traditionalist Ibn 'Abd al Barr in his famous *Tamhīd*, which on the basis of the traditional division of the Berbers into two major confederations, the Barānis and the Botr, reports that the Botr are not Berbers but Arabs descended from Barr'ibn Qays ibn'aylan in ibn Moḍar.

The upshot of all these theories is that, while none of them is entirely accurate, the populations which invaded North Africa and which we know under the name of Berbers migrated from the Arabian peninsula in very remote times; and that a very thorough study of their language shows that it is a Semitic language and even one of the oldest Semitic languages since it is related to Akkadian. We may therefore say in conclusion that they migrated from Mesopotamia with long halts in Palestine for some and in Yemen in the case of others before reaching Egypt and subsequently North Africa. A trace of this great journey is still to be found at Siwa, a Berber oasis in eastern Egypt.

Garamantian burial customs: their relation to those of other peoples of North Africa

F. El-Rashdy

The Garamantes were the ancient inhabitants of Fezzān, one of the southern regions of modern Libya (see Maps 1 and 2). They are attested by classical writers, from Herodotus until late Roman times. Recent work by the Libyan Department of Antiquities (Ayoub, 1961, 1967) and the British expedition led by C. M. Daniels, has produced a mass of new archaeological materials, to add to that already published by the 1933 Italian expedition (Caputo et al., 1951) and the 1949 French expedition (Pauphilet, 1953).

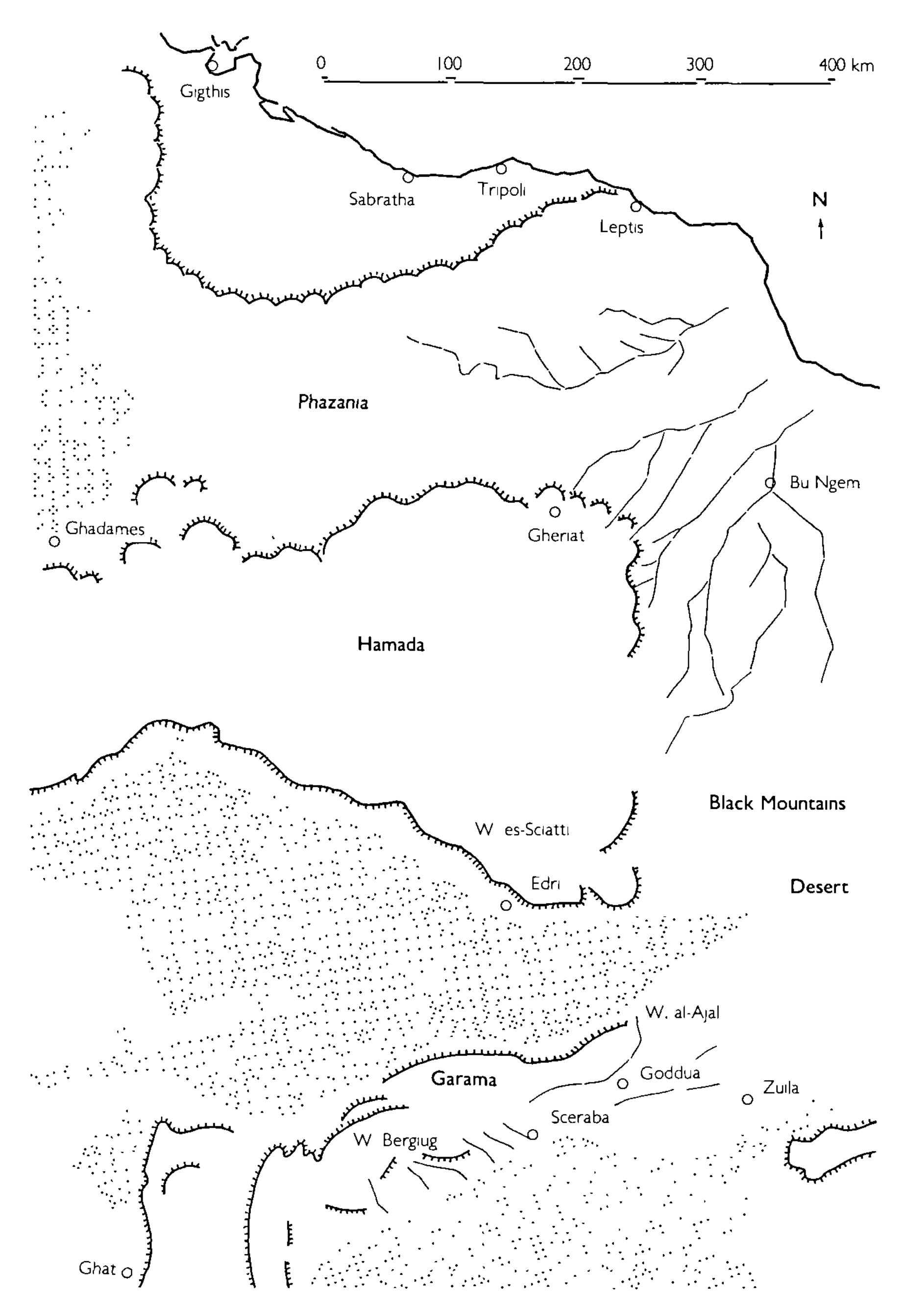
Burial custom is one of the important aspects of the Garamantian culture to be discussed in this article. Here the Garamantian burial customs are looked at in the context of the Berber and other peoples of North Africa as a whole.

The earliest burials at Wādī al-Ajal are like those commonly practised by the north-west African Berbers, namely the simple cairn (Fig. 1). They are found scattered in their thousands over the slopes of the escarpment of the Hamada, each one standing on its own right without imposing on other cairns. On inspection these early cairns are typical examples of the simplest type of monuments throughout the Berber area of North Africa.

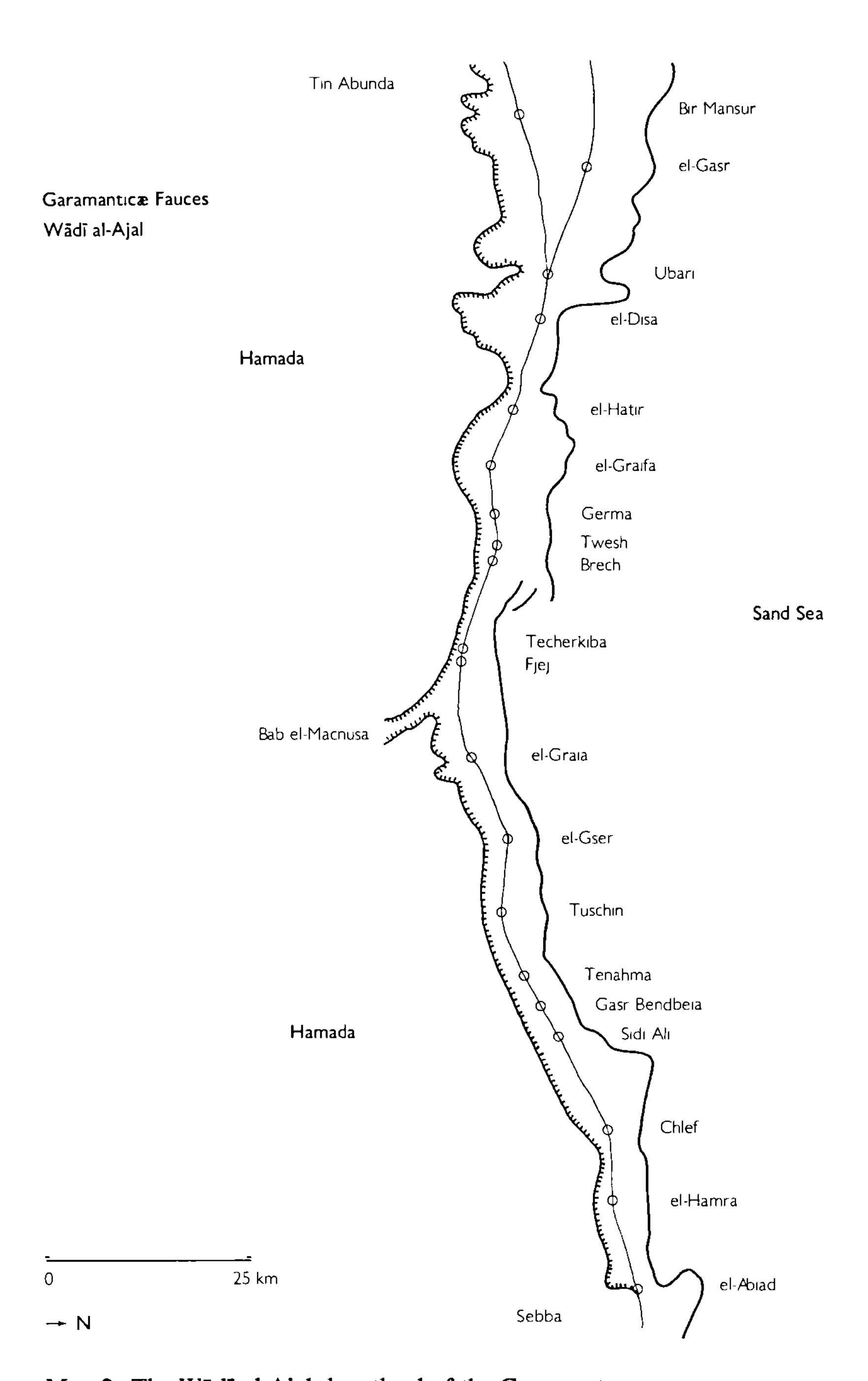
Cylindrical cairn (chouchet)

The most developed of early tombs, however, are the cylindrical cairns, called *chouchets*. These are circular drums of unmarked stones with a flat top. Examples of these are found in the sites of Fgeg and the area of Kasr al-Watwat (Uatuat) and other sites. Many of these in the wādī look as though they were built as stepped tombs, like those at Zinchecra (Figs. 2 and 3), but the mots striking of the cylindrical tombs are the third century type from the necropolis of Saniat Ben Howedy (Fig. 4). They were built entirely of mud bricks, laid with skill and from the variation in the method of construction visible, one feels the sense of imagination of the Garamantian craftsmen.

The cylindrical tomb, or *chouchet*, is in fact an indigenous North African type. The ancient inhabitants of most of the region seem to have been familiar with its form. These are the C-Group people and the Seal Island inhabitants



MAP 1. Garama, the *limes* forts and cities of the coast. The lines of oases are those of Hofra (Zuila), the al-Ajal (Garama) and the Sciatti (Edri).



MAP 2. The Wādī al-Ajal, heartland of the Garamantes.



FIG. 1. Typical simple cairn in Wādī al-Ajal.

FIG. 2. Stepped cylindrical tomb at Zinchecra.



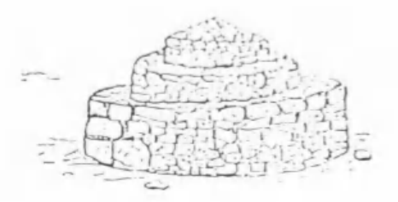


FIG. 3. Reconstruction of the cylindrical stepped tomb in Wādī al-Ajal (after Camps).

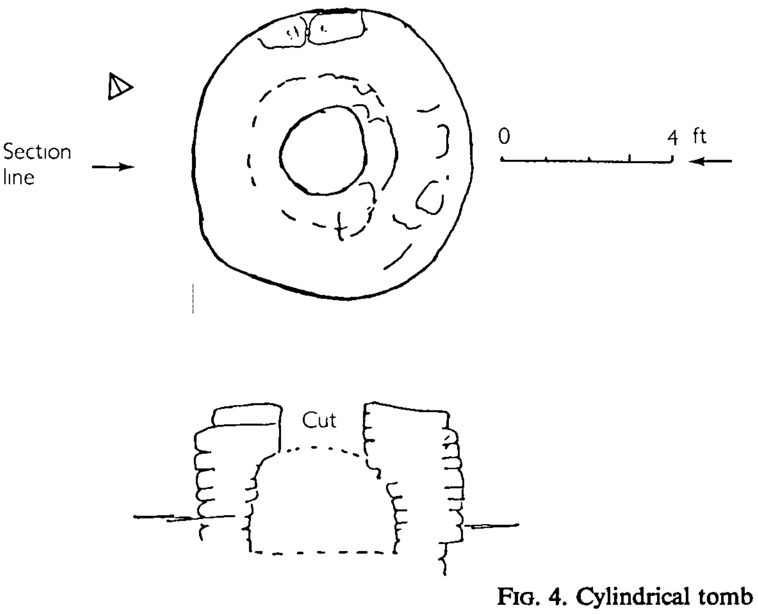
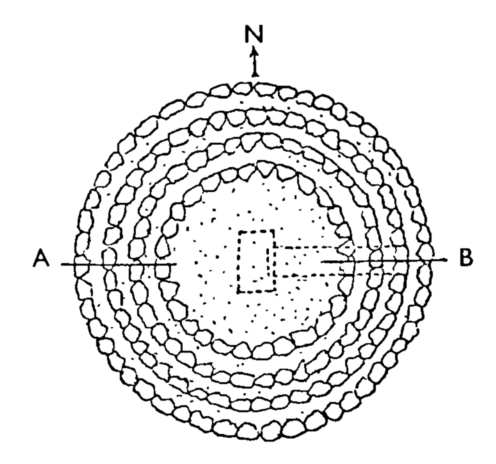


FIG. 4. Cylindrical tomb No. 12 at Saniat Ben Howedy.



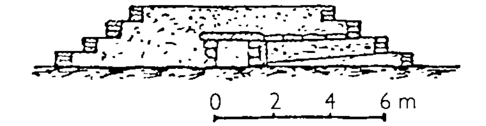


FIG. 5. Cylindrical tomb at Djabal Mistiri, Algeria (after Camps).



FIG. 6. Tomb No. IX at Al-Charaig (after Caputo).

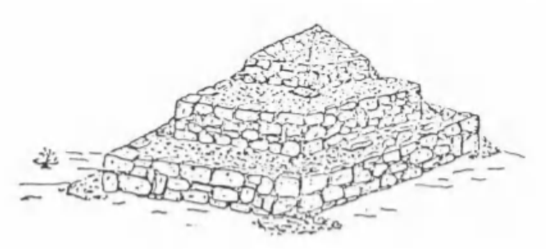


FIG. 7. Reconstruction of the stepped square tomb in Wādī al-Ajal (after Camps).

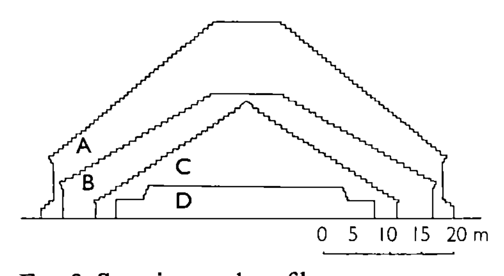


FIG. 9. Superimposed profile of Berber grand tombs (after Camps): (A) Tomb of the Christian Woman (Algeria); (B) the Medracen (Algeria); (C) the Djedar (Algeria); (D) El Guur (Morocco).

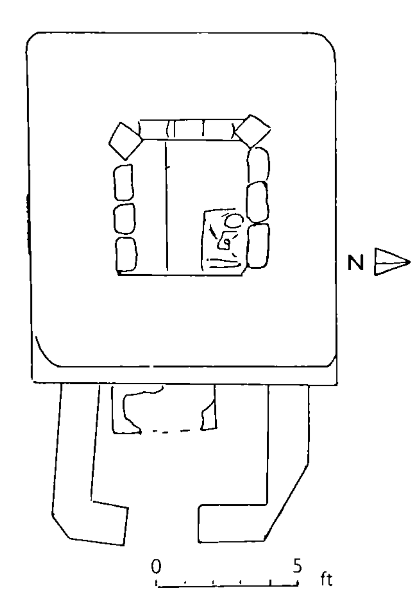


FIG. 8. Tomb at Saniat Ben Howedy (after Daniels).

in the east, the Berbers of Al-Maghreb and the Sahara, south of Morocco, in the west (Fig. 5). The Medracen and the Tomb of the Christian Woman 'Gabr Arromya' in Algeria are, no doubt, the culmination of this type. They are, in fact, elaborate enlargements of the simple cylindrical tomb. What we have in Wādī al-Ajal is an example of the same Berber tradition. If we accept that the stepped tomb evolved from the cylindrical tomb, then it is impossible not to apply this to the Garamantian tombs. The Zinchecra four-stepped cairn is indeed a fine example of this evolution.

The quadrangular cairn (*bazina*)

The square and quadrangular cairn too should be considered among the developed forms of the Berber tombs. Like the *chouchets* many of these were provided with steps, a feature which qualify them for the term *bazina*. Wādī al-Ajal has a wealth of this type of burial. These examples from Necropole Monumentale, or the Royal Necropolis (5 km south of the old Germa), are square or oblong in shape, surmounted by two or three steps (Figs. 6 and 7). Externally they had been coated with plaster. One particular example in Saniat Ben Howedy (3 km east of Germa) is rather sophisticated in its construction (Fig. 8). It was built of mud-bricks, as is the case with all the Saniat Ben Howedy tombs, and only partly appears above ground level. What one can actually see is a quadrangular-shaped construction. Externally on the eastern side of the tomb there is a projection, consisting of two low walls which included the remains of a stele and a mensa table.

The square tombs are found in other parts of North Africa (Fig. 9). In Mauretania there are tombs which show similarity to the Saniat Ben Howedy square tombs. One difference is that some of the Mauretanian monuments are somewhat larger in size than the Saniat Ben Howedy tombs. The Djeddars of Algeria, on the other hand, are by far the most developed quadrangular tombs in north-west Africa. They are more elaborate than the previously mentioned examples, and comparatively large. Being late in date (third to fourth century of our era), they may encourage us to assume that the Wādī al-Ajal stepped tombs could be a simple and true miniature of the sophisticated Djedar of Algeria.

The pyramidal tombs

Three necropolises are known to us in the Wādī al-Ajal which contain pyramid tombs. One necropolis lies at the foot of the escarpment at Al-Charaig (Fig. 10), and two more were discovered in 1959 in the vicinity of Al-Hatia in the wādī



FIG. 10. Pyramidal tomb No. I at Al-Charaig (after Caputo).

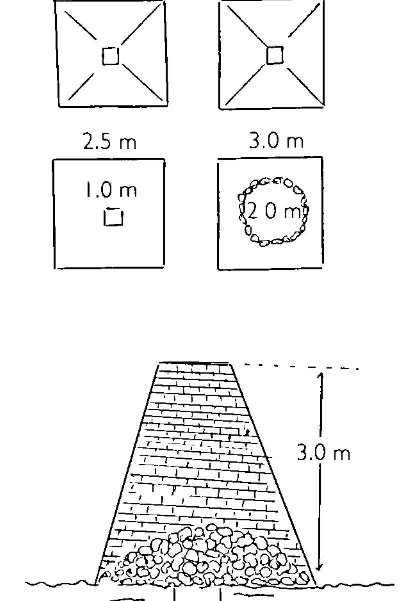


FIG. 11. A section of a pyramidal tomb (after Daniels).

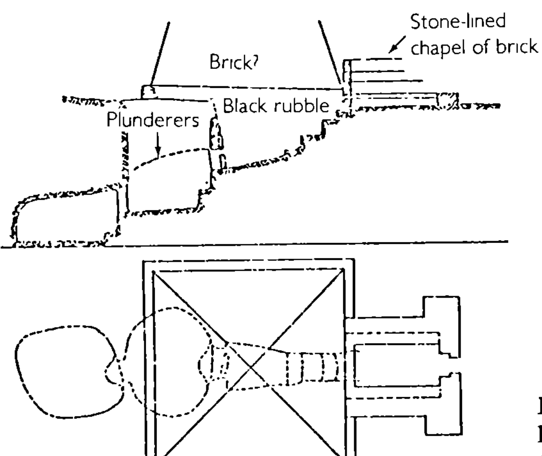


FIG. 12. Bagarawiyah No. 27, late Meroitic pyramid (after Dunham).

centre. In addition, isolated examples have been noted at random points at the wādī centre (Daniels, 1970, p. 35).

The pyramids usually face east, and so were entered from that side. The burial had been in a square shaft below ground level, covered by a pile of stones (Fig. 11).

The question of the origin of this type is an interesting one. Here, in the Wādī al-Ajal, we are confronted with a shape of a tomb which apparently has nothing in common with other types, and which is not easy to parallel elsewhere in north-west Africa. In view of this, the most likely source of influence is the east and south-east, i.e. Egypt and the Sudan, whose ancient inhabitants have been associated with pyramids for a very long time. The tendency has been to attribute the source of this influence to the Meroitic culture of the Sudan, since its capital, Meroe, was in existence for nearly 900 years (sixth century before our era to +350). During this long period, pyramids were the usual place of burial for the Meroitic kings and their families (Shinnie, 1967, p. 52). It is true, however, that the Meroitic culture in general, and the pyramid tombs in particular, were themselves the result of Egyptian influence, especially that of the New Kingdom (—1580/—1100). It is unlikely, however, that Egyptian influence could have been transferred directly from the Nile valley to the Wādī al-Ajal in as early a period as the great Egyptian Dynasties, so that the position and the date of the Meroitic kingdom is of great significance.

The suggested date of the Al-Ajal pyramids is that of the decline of the Meroitic kingdom, which could well be the source of this type of monument. The best-preserved Meroitic examples are those built at Djabal Barkal. These are earlier in date, built in the first century of our era, at a time when the Meroitic culture was in its grandeur (Dunham, 1957, p. 91). On the other hand, the northern necropolis at Bagariyah (Fig. 12) provides us with tombs as late as the fourth century A.D. (Dunham, 1957, p. 191; Shinnie, 1967, p. 152).

An attempt to compare the Meroitic pyramids to those of the Wādī al-Ajal must, unfortunately, be restricted to aspects of the shape and the orientation of the tombs. Those at Meroe usually look west or south-east; the majority of the Wādī al-Ajal tombs look east. No trace of an enclosure or chapel was found in the Wādī al-Ajal, but the traditional stelae and offering tables are in evidence.

The burial at Al-Charaig in the Wādī al-Ajal was apparently below a pile of stones under the pyramid itself, beneath a vertical shaft. So far, however, nobody is in a position to form any idea about the size of the actual grave nor about its orientation. One can only assume that the bodies were inhumed in a crouched position.

With regard to the anthropological aspects of the people who built the Wādī al-Ajal pyramids, it has been suggested that the building of the tombs

could be the result of the arrival of a foreign race, possibly Egyptian or Nubian, since the result of Sergi's study of two skulls found at Al-Charaig shows that they belonged fo a Euro-African race (Caputo et al, 1951, pp. 371-3). However, the limited investigation which was carried out by the Italian expedition produced far too little material for any serious conclusions to be arrived at. Moreover, their work covered only the Al-Charaig necropolis. The discovery of the Al-Hatia necropolis and other isolated examples of the pyramid tomb indicates that this type seem to have been more widely used by the Garamantes than previously suggested. Much more investigation of these tombs is needed.

The adoption of the pyramid tomb in the Wādī al-Ajal is perhaps no more than a matter of fashion. On the other hand, the presence of this type of tomb is probably an indication of contact between the ancient inhabitants of Wādī al-Ajal and those of Meroe. Indeed, there are some who suggest that the first independent kingdom of Cush was founded by the Libyan ancestors of Piankhi (Risner, 1923, p. 34). There is also the suggestion that the tribe of Al-Kauran in the Sudan are the ancestors of the Garamantes (Kirwan, 1934, pp. 201–2). However, we need to solve the problem of the anthropology of the tribe before we can start to determine such a relationship.

The Germa Mausoleum

The final type of funerary monument in the Garamantian area is the so-called Germa Mausoleum or Gasr al-Watwat (Fig. 13), long considered a unique example of Roman penetration into the Sahara, and it is now known to be the only surviving example of at least five such mausoleums, all in the vicinity of Germa. But before considering the nature of this famous monument and in order to understand it, we should look at other examples of North African mausoleums.

The older indigenous type of North African mausoleum stands in the tradition of the simple Berber monument (Fig. 9). At its grandest it can be seen in the tombs which were built for the indigenous Royal Dynasties and which, without doubt, evolved from earlier, simple tombs. Three examples of these exist: the Medracen in the Batna region (Algeria), the Tomb of the Christian Woman Kabr Arroumya in Arabia, near Tipasa, and the Djeddar at Djabal Lakdar, near Tiarēt. All are in Algeria.

Another type of North African mausoleum is the tower type. These are tall masonry structures, square or rectangular in plan, rising from bases that are often stepped. This type of tomb is widely spread across northern Africa and across the Mediterranean areas, in France, Italy, Sicily and Dalmatia. Other examples are from Syria and Mesopotamia. In origin, the tower mausoleums are thought to be Syrian (Boethius and Ward-Perkins, 1970, p. 301).

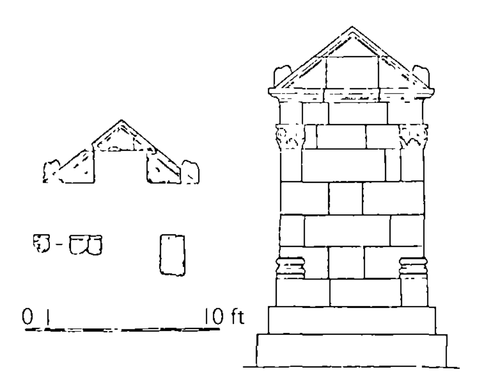


FIG. 13. Germa Mausoleum, a possible restoration with pediment near elevation by C. M. Daniels.

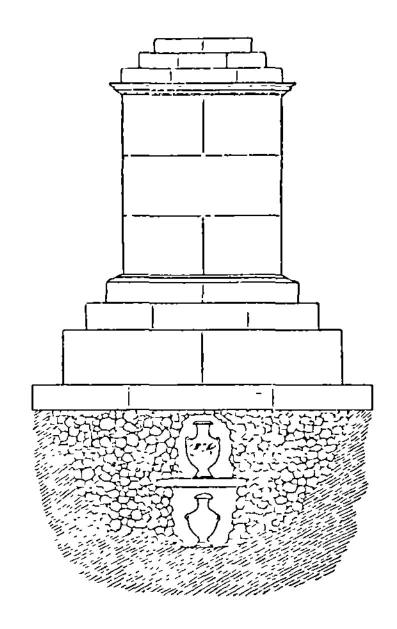


FIG. 14. Ptolemaic tomb at the Sciatbi necropolis (after Breccia, 1912).

Mausoleum B at Sabratha (Di Vita, 1968, pp. 16–44), and that at Beni Rhenane, in the Oran region in Algeria, belong to the same type, and they may qualify for the term Puno-Hellenistic as opposed to Libyco-Punic, as in the case of the Medracen monument.

Among this type there is a group of mausoleums found widely throughout the Algero-Libyan pre-desert. These monuments date from Punic or Hellenistic times and continue through the Roman period. Most important among these are a group of mausoleums at Girza. Here, there are fourteen tombs divided between the north and south necropolises, which served a large settlement of fortified form dating from the third and fourth centuries (Brogan, 1955, p. 173). These were again subdivided into two categories, temple and obelisk tombs.

It seems to me, however, that the Germa Mausoleum does not belong either to the littoral mausoleum like Sabratha B nor to the pre-desert tombs. It is comparatively small in size and unsophisticated in its form. Following its latest restoration, it appears to be crowned with a pediment placed on a solid cella, which stands on a projecting podium. This feature is not at all common,

either in the littoral or in the pre-desert areas. What makes it unusual is its lack of a subterranean burial chamber. All these elements make in uncertain as to whether we should accept the classification of this monument as a mausoleum. However, on the west side, less than a metre from the monument, two graves were found by the 1933 Italian expedition, under a heap of sand and stones. Each grave contained a Roman amphora of first or second century type, filled with burned bones. It is claimed that these two burials are related to the monument (Caputo et al., 1951, pp. 268–70). As cremations are exceptionally rare in the Al-Ajal, the suggested connection with the monument may well be correct. A normal cairn-type cemetery of late first and early second century date surrounded the mausoleum.

It is not irrelevant at this stage to mention a monument which has the same features as that of the Wādi al-Ajal Mausoleum. These are the tombs found in Ptolemaic Alexandria at the Sciatbi necropolis. Each consists of a solid cella set on a stepped podium and crowned by a cornice topped by steps (Fig. 14). Two cinerary urns were recovered, below the monument separated by a flagstone, but otherwise there was no burial chamber. Their date is third century before our era (Breccia, 1912, p. xv), which is relatively early. It is not, however, without significance that this type of monument occurs there at a date possibly earlier than farther west in North Africa.

For the nature of the Germa monument, when we consider the strictly classical form and the decoration, it is safer to see it within a Roman framework rather than within a native or even a Punic context, for if has Romanized features. Its essential size and shape, however, are reminiscent of similar monuments in the western cemetery at Tipasa (Algeria), which shows a combination of Roman and Punic features. But in its details, such as the use of a pedimental roof in place of a pyramid, the Germa is just like the well-built stone buildings at Germa. Although most probably the work of imported craftsmen, it was most likely erected for some important local person, perhaps one of the chiefs of the Garamantes.

The Garamantian gravestone

Unlike the gravestones of contemporary cultures around the Mediterranean, only a very few of the Wādī al-Ajal examples bear inscriptions, and where collected in the wādī these have proved to be of relatively recent date. This leaves us very much in the dark when considering Garamantian customs and beliefs and has probably contributed to the fact that no attempt was made to examine the Garamantian gravestones systematically, and study their nature.

The earliest types of simple cairn do not seem to have had any form of stele. It is the development of tombs which seems to have brought about the

introduction of upright stelae at some unknown date. The gravestones of these cairns are sometimes more than one slab in number, for double and triple stones are frequently joined.

Later necropolises of the Wādī al-Ajal show a further stage of development of tomb types. They also show the sudden emergence of much more developed and sophisticated gravestones, which seem to have come into fashion very abruptly. As these show a variety of forms, they are classed into groups, such as stelae, horns and hands. These appear in necropolises containing fine red-ware Roman pottery, which dates their emergence to some time in the first century of our era or perhaps just a little earlier.

The pressing questions about these developed gravestones are their meaning and their origin. Are they indigenous or are they the result of foreign influence; or a mixture of both?

Stela-shaped gravestones

The early tombs of the Wādī al-Ajal were found to be accompanied by two large slabs as stelae were found side by side, each of which had a roughly angled upper edge, giving the effect of a very crude gable (Figs. 15 and 16). This is, perhaps, no coincidence. They are considered to be the successors of the *cippi* of the seventh and sixth centuries before our era. One example of these from Carthage, has a Punic text and decoration on its face, of the sort familiar to scholars, that is, incorporating the solar disc and crescent moon, pointing downwards (Fig. 17). This change in the typology of Punic stelae, it has been claimed, resulted from the appearance of Tanit at the head of the Carthaginian pantheon (Bisi, 1968, p. 121). Concerning the Garamantian examples, nobody is in any way sure whether the triangular-topped stelae had the same meaning. All one can say is that there is a similarity between those in Fezzān and later Punic gravestones. It is possible, therefore, to assume that the Garamantes may have imitated the Punic stelae when making their gravestones. It is not surprising, then, to find that most of the triangular top slabs such as those in the vicinity of Ḳasr al-Watwat and Fgeg are among the earlier types in Wādī al-Ajal.

Horn-shaped gravestones

The use of the horn as a symbol appears for the first time as early as the Neolithic period (Fig. 18), and it can be easily traced as late as the Roman period. Furthermore, this symbol is found throughout a wide area stretching from neolithic sites in the Sahara to centres in the Mediterranean.

In Fezzān, the horn-shaped gravestone appears with the early tombs of the Necropole Meridionale and Necropole Monumentale (Fig. 19). Some of



FIG. 15. Gravestone No. 18 with gable-shape top at Watwat (13) (after Daniels).



FIG. 16. Stela with pointed top from tomb No. 2 in Necropole Orientale (after Caputo).

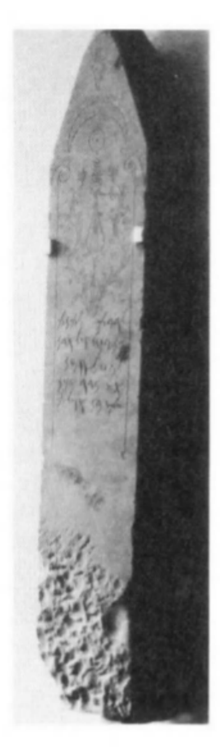


FIG. 17. Stela with gable top from Carthage.

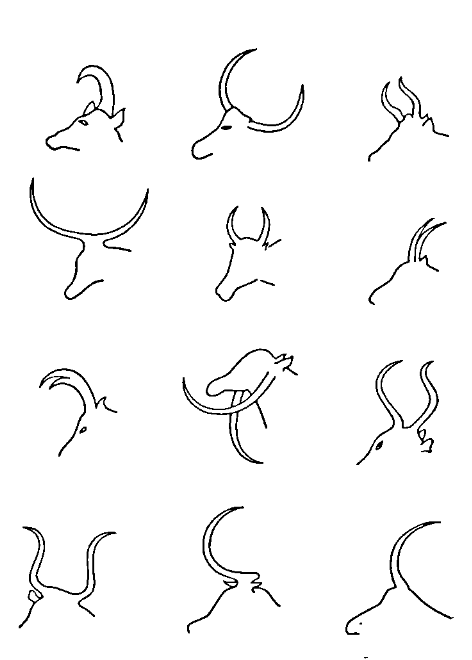


FIG. 18. Representation of the horn in the Libyan rock art (after Winorath).

the stones found next to the tombs were roughly cut and crudely shaped whereas others were smoothly rounded and well shaped.

Many attempts have been made to establish a link between the horn symbol which appears in the rock art of Fezzān and those represented in similar symbols from later periods and from other cultures. The series of emblematic horns found in Libya was said to express in many instances, a constellation with the moon, sun or light in general.

More often the horn was found to be treated in an abstract or surrealistic way (Winorath-Scott and Fabri, 1966/67, pp. 233–9).

One can suggest, then, that the Garamantes may have simply continued the Neolithic tradition and passed it on to the medieval inhabitants, allowing the horn symbol to survive until the present time.

Hand-like gravestones

This type of gravestone is easily recognizable, it is an upright stone slab usually set against the tomb wall and always behind the so-called offering tables (Fig. 20). It is usually of carved sandstone; 1 m high and 60 cm wide is an



Fig. 19. Horn-like stelae from Saniat Ben Howedy (after Daniels).

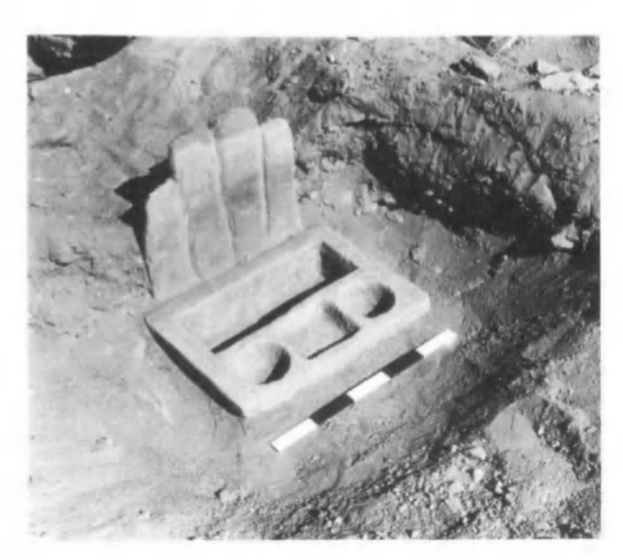


Fig. 20. Hand-like stela and offering table from a Roman date grave at Zinchecra Necropolis (after Daniels).



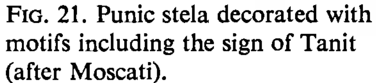


Fig. 21. Punic stela decorated with motifs including the sign of Tanit (after Moscati).

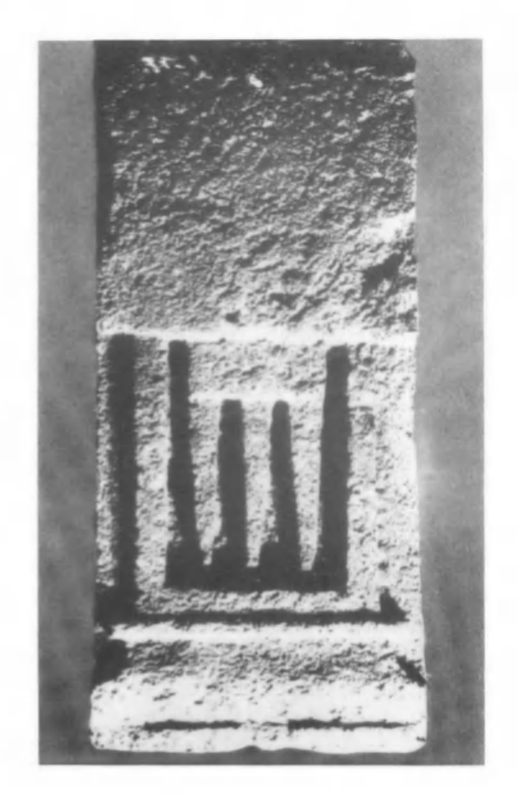


Fig. 22. Phoenician stela with three baetyls (after Moscati).

average size. The name 'hand', an arbitrary term, is given to the stone because of its unusual shape and its resemblance to the human hand. The stone consists of three or four parts divided by two or three grooves, cut vertically on the stone. The result is three or four divisions that look like fingers.

The use of the term 'hand' to describe these stones seems to have been inspired by the representation of hands engraved on Punic stelae, so there is the feeling that the Garamantian hands could be the result of Punic influence. The hand appears in Punic art a long time before the Garamantian gravestones began to be used, and the early examples of stelae bearing hands are dated to the third century before our era. It should also be noted that the Punic hand is by and large a genuine and true hand, engraved or moulded on the stelae.

In the earliest examples on Punics telae of the fourth century before our era, a male or female figure is carved in a rectangular niche, with the right hand raised (see Fig. 25). This has been interpreted as a priest or priestess praying and is always represented in the same fashion, on later examples only the hand remained, sometimes carved in the gable top of the stone (Fig. 21), sometimes

occupying a panel on its face, along with a number of other symbols, including the so-called sign of Tanit. The Garamantian hands appear to be very different. Most of them consist of four fingers, although a few consist of three: none at all have five. This wide number of variations in size and shape makes it very unlikely that the Garamantian gravestones were ever, in reality, intended to represent human hands.

There are, however, types of Punic gravestones which are, in a way, similar to the Garamantian ones. These are the Carthaginian *cippi* where the stelae were said to be baetylic symbols personifying deities (Fig. 22). Indeed the representation of a god was revered as the God himself (Bisi, 1968, p. 119). The baetylic symbols on the Carthaginian stelae are shown in a variety of ways. There are pillar-shaped baetyls, as well as those which are rectangular or taper slightly towards the top. The number carved on any one stone also varies. Single, double and triple baetyls are frequently found. We have an example from Tunisia in which no less than six baetyls were carved on one stele, an arrangement which has also been paralleled on a Punic *naos cippius*.

A study of these Punic stelae is important to anyone attempting to understand the mystery behind the Garamantian hand type of gravestone. However, the lack of any epigraphical evidence makes such an understanding more difficult, and guesswork and speculation are the main approaches. It is not impossible, therefore, to suppose that the Garamantian so-called hands, like the Phoenician and the Carthaginian examples, could be baetylic representations and aniconic symbols of unknown deities.

The offering tables

In front of this stele we frequently find the offering tables which are carved stone blocks of varying sizes, usually placed on the east or west side of the tomb, in front of the stelae. Their purpose was to carry the votive objects given by relatives of the deceased, either to the deceased himself, or herself, or just possibly to the deity, as embodied in and represented by the stelae.

The majority of the Garamantian tables are rectangular in shape and divided into two parts: the first consists of a large rectangular depression (which is always placed next to the stele), the second is occupied by the smaller depressions. Zinchecra has provided a Roman-date offering table in which the depressions were very neatly cut (Fig. 20). The large depression occupies one half of the stone and the three smaller depressions occupy the other half.

A quick look at the tables in Sebha Museum shows the wide range of variations in shape, number of depressions and the size of the table (Fig. 23). The average table measures 20–25 cm in height, 70–100 cm in length and 40–50 cm in width. The large rectangular depression is usually very deep in

comparison with the smaller depressions, which tend to be very shallow.

As the African tables vary widely in their form of decoration, we must now consider the individual types found. When examined, these appear to be of at least four different sorts.

The first is the most elaborate type of table on which offerings are represented. These are usually rectangular in plan and made of different types of stones. Libation vases, loaves of bread and even cuts of meat are depicted in relief on the table tops. Examples come from al-Ghariat, Tabunia and Wādī Um-El-Agaerem (D. Smith, unpublished work).

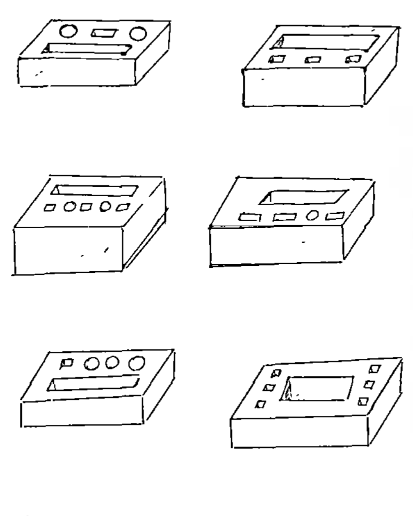
The second type is similar in form. It consists of stones with rough depressions cut into the upper surface. While they are designed to take offerings, this is to hold an upright stela. Also from Libya, the pre-desert provides examples, in Tripoli Museum, from Wādī-El-Amud and Tabunia, Syrte, etc. In some examples, it is not clear whether the large depression is meant for an upright slab or not. Tripoli 2456 actually has fragments of shaft still in the depression (Fig. 24).

The third type is a rare one, found only at Chirza in the pre-desert of Libya. It is a narrow elongated block of stones which has two, three or four circular or rectangular depressions. One stone has seven circular depressions, the one in the centre being relatively larger than the others (Brogan, 1955, p. 184).

It would be rash in our present state of knowledge to assign origins to any of these types of tables in a dogmatic way. On the other hand, it can certainly be suggested that as the second type of table is found widely across much of north-west Africa, there is possibly an indigenous element present in them. External influence is also present—not Greek and unlikely to be Punic. Some influence could well be Roman, but another possibility must not be overlooked: this is Egypt, the land of the Pharaohs.

Here the customs and traditions in the cult of the dead were consistent for more than 3,000 years. It is perhaps, then, no surprise that we are able to find parallels to many of the types of offering table found in the Fezzān, the pre-desert and the coastal areas.

The tradition of presenting an offering table in ancient Egypt is a very old one. It goes back to the time of the Old Kingdom (—2778/—2300) and continues through the New Kingdom (—1570/—1075) a long period of time. Through these millennia, the burial custom in general, and the offering tables in particular, experienced gradual changes. The practice started with a simple type of table, with a rectangular depression, as the main feature. This, perhaps, indicates the importance of liquid offerings in the Old Kingdom. Among this type, single, double, triple or even multiple depressions are found in a single table. The surface of these tables was either inscribed or engraved with different scenes and representations of the supposed offering objects (Vandier, 1951, p. 522). In one example (Fig. 25), four rectangular and eight small circular



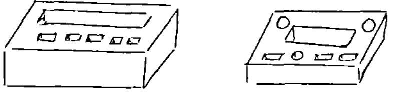
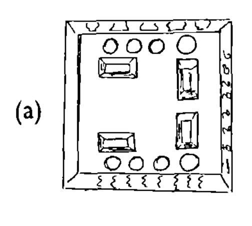
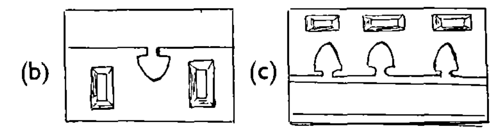


FIG. 23. Typical Garamantian offering table at Sebha Museum.



FIG. 24. Offering table with fragment of stela in its larger depression (Tripoli Castle 2456).





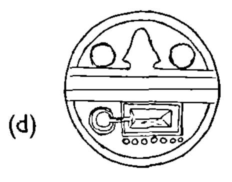


FIG. 25. (a) Offering table belonging to the Old Kingdom; (b, c, d) Elaborate Old Kingdom offering table (after Vandier).

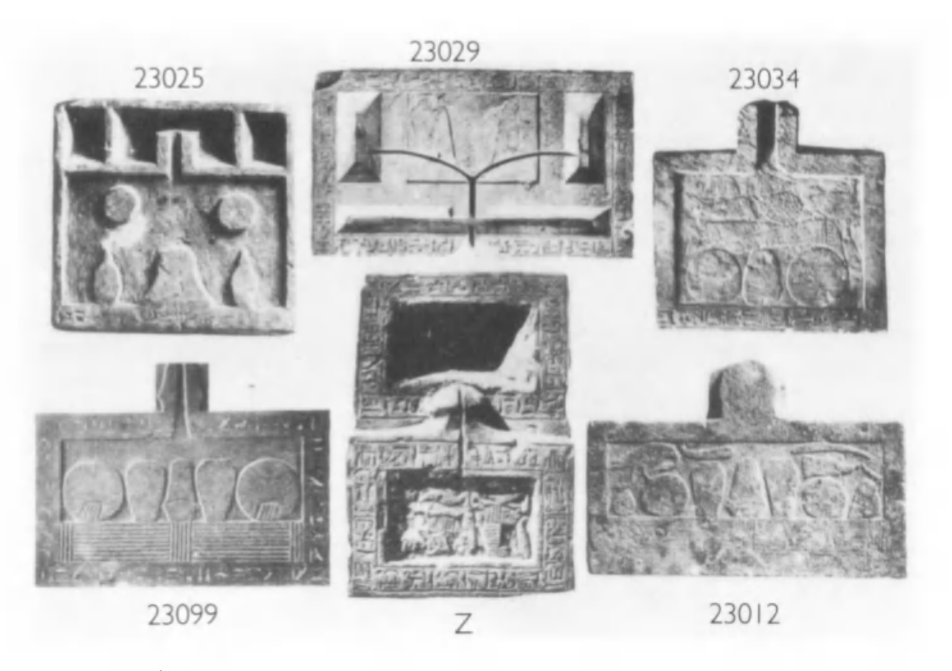


FIG. 26. Typical Middle Kingdom offering table (Cairo 23025, 23029). Typical New Kingdom offering table (Cairo 23034, 23049, 23012). (Z) New Kingdom offering table from Dier et-Medinah.



FIG. 27. Offering table of the Meroitic King Arefesbekh (second half of the first century before our era).

depressions have been cut into the table surface, and the centre has been engraved with different scenes. The frame was also decorated with animals, different types of vases and signs. It is, in fact, the tables of the early stage of the Old Kingdom that are very similar to some of these Libyan examples.

Another stage in the development of the Egyptian tables, but still belonging to the Old Kingdom, shows the introduction of various objects, including human figures, in low relief. More important, is the introduction of the sign '*Hetep*' 𓊵, representing a mat of reeds and bread. It usually occupies one of the long sides of the table and is accompanied by one or a number of depressions (Vandier, 1954, p. 528). Vases, bread, cakes and other objects are still represented. By the time of the New Kingdom (—1570/—1075), the offering tables seem to have lost their importance and are rarely found. The shape has changed to a tray-like rectangle, with a few square examples represented. The sign of *Hetep* is no longer engraved on the table, as the table itself has come to represent this sign (Fig. 26).

The similarity of appearance between some of these Egyptian tables and the examples already quoted from Ghariat and Tabunia in the Libyan pre-desert is striking. However, the difference in dates is considerably over 1,000 years. Is it possible that there could really be a connection between the two?

On the other hand, the Meroitic culture of the Sudan is a stronger possible source. The kingdom of Meroe lasted from the sixth century before until the fourth century of our era and is considered to be Egyptian in its basic culture. Offering tables appeared to be well known to the ancient inhabitants of Meroe, for they have been found in great quantity in the necropolises surrounding the ancient sites of the Meroitic kingdom. They are usually found in front of the entrance to the tombs.

The Meroitic offering tables are usually but not invariably inscribed. The earliest examples are of the seventh century before our era (Dunham, 1955, p. 23). Here the tables are made of grey granite. The offerings here were represented in low relief. In the fourth century (see Fig. 33) more food representations appear (Dunham, 1955, p. 226). On the tables of later periods (first century before/of our era) a scene replaces the food representation showing the curious half-human, half-jackal god Anubis, in the Egyptian religion, representing the soul (Fig. 27). Facing him is the goddess Nephtes (Dunham, 1955, p. 137).

The Wādī al-Ajal offering tables are in no way similar to the Meroitic example. They are thicker and rarely inscribed. The presence of the depressions on them is another difference. Moreover, the types of stela which are usually associated with the Wādī al-Ajal examples are nothing like those at Meroe. The pre-desert, on the other hand, seems to provide examples of all types mentioned in Egypt, Nubia and north-west Africa. In our present state of knowledge it is not easy to assign the origin of the Garamantian table to any source even though it is claimed that a Meroitic influence is present in the pyramid tomb.

The Rite of inhumation

The Garamantes appear to have practised only one type of inhumation, that is with the body in a crouched position. The body was placed in a curled-up position, with different degrees of contraction, varying from the relaxed or semi-contracted position to the very contracted type of foetal posture (Fig. 28). This is a form which was widely practised in north-west Africa and the southern Sahara since prehistoric times. A neolithic inhumation was found in the Oran region (Algeria) in an excavated grotto at Wādī al-Guettara (Fig. 29) (Camps, 1974, p. 254). The position of the body here, and the degree of contraction, are identical with the Garamantian inhumations.

The significance of the crouched position in the Garamantian tradition is not clearly understood, as no record has survived to explain it. One can only guess that if the Garamantes believed in afterlife, and shared the beliefs of other early cultures, placing the body of the deceased in a foetal position perhaps meant that the deceased was awaiting rebirth to a new life.

Some skeletons had their heads supported by a wooden head-post (Fig. 30), a custom which seems to have a long tradition in the ancient world. The only parallel, however, to the type of head-rest found in Wādī al-Ajal is the type widely used by the ancient Egyptians. The form of head-rest used by the Pharaohs had strong symbolic and aesthetic significance, as witnessed by the different types of head-rest. The Egyptian head-rest was originally made of wood, usually in the form of a curved pillow on a columnar or solid support. If was usually found under the head of the deceased as he lay in the sarcophagus.

A number of head-rests were found in Tutankhamun's treasure, one of them being made up of turquoise-blue glass embossed with gold. The shape of the head-rest is said to symbolize a myth very well illustrated in another ivory head-rest. It represents the Earth God and the Sky Goddess, separated by their father, Shu, the God of Atmosphere. The Caryatid figure Shu, thrusts himself between the earth and the sky and raises the sky with all Gods hitherto created. The rising and setting of the Sun God Ra is represented by two lions (Fig. 31). The deceased may now lay down his head and rest in heaven.

One may ask the question whether this indicates that the Garamantes had adopted the same beliefs as the Egyptians, or whether the presence of head-rests in the Wādī al-Ajal is just a coincidence? If one takes into consideration other elements in the Wādī al-Ajal which can easily be paralleled in Egypt, one finds that the head-rest is by no means an isolated example of Egyptian influence in the Garamantian region.

As the deceased was supposed to enjoy an afterlife in his tomb, which was considered the hall of eternity, everything had been done to help the dead



FIG. 28. A skeleton in a crouched position from Gat Necropolis (after Sergi).

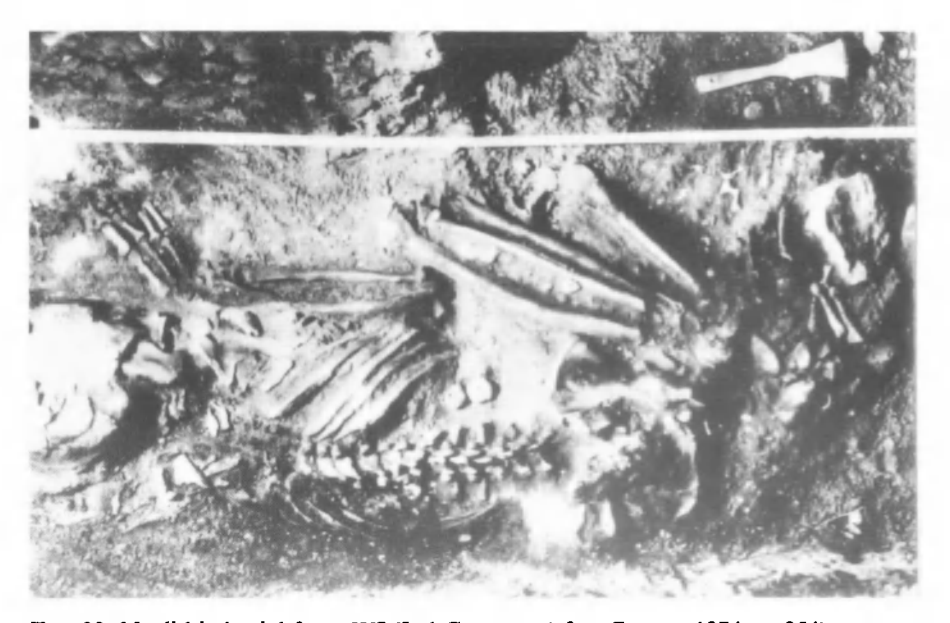


FIG. 29. Neolithic burial from Wādī al-Guettara (after Camps, 1974, p. 254).

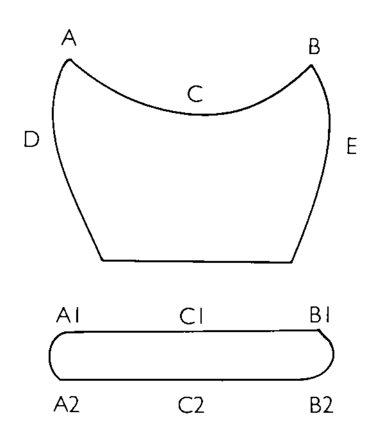


FIG. 30. Head-rest from Zinchecra 209 (after Daniels).

FIG. 31. A head-rest from Tutankhamun's treasury.

person to enjoy his afterlife. Objects used in daily life, such as vessels and other objects, were placed around the body, a custom which was practised in most contemporary cultures. The materials found usually indicate the status and wealth of the deceased. Many toilet articles, doubtless for some ritual purposes, and amulets, perhaps to protect the dead and drive away the evil spirits, are usually found inside the tombs. These consist of goods from a wide area of the Mediterranean: Carthage, southern Gaul, Italy and Egypt.

Geographically speaking, Fezzan, the land of the Garamantes, was indeed in a unique position. The ancient inhabitants controlled whatever caravan traffic existed to the land of the Ethiopian Troglodytes in the Sahara. Before the Romans, Africa west of the Syrtes was completely under Carthaginian dominion, and it is clear that the Carthaginians were interested in contact with the peoples of the interior. The story of the building of the altars of the Philaeni by the middle of the fourth century before our era at the western limit of Greek dominion, shows how effectively the Carthaginians denied the Greeks the use of the Garamantian roads to Fezzān.

The Garamantians were in an important position as middlemen in whatever trade in carbuncles, gold and, probably, ivory existed. They also inhabited an area of fertile wādīs in prosperity and ultimately, wealth.

Like most of the Berber tombs, the cylindrical and quadrangular tombs of the wādī are crude and should perhaps be seen as simpler versions of more sophisticated monuments in Algeria and Morocco. The stepped form (cylindrical and quadrangular) could be taken as an honest imitation of Egyptian tombs. Indeed, the Saniat Ben Howedy and Taglit examples are simplified forms of the Egyptian Mastaba.

For the pyramid tombs of the Wādī al-Ajal, there is only one source: the Meroitic culture of Nubia. Monuments in both places share the same form, and the time gap between them is relatively small. A relationship between the people of the Wādī al-Ajal and Nubia is mentioned frequently, both in peacetime and in war. Among the grave foods of early Meroitic tombs, Libyan captives are engraved on stones (Dunham, 1955, p. 69). Indeed, some authors suggest that the range of the Garamantes may have extended even to the Nile. South-east, the area north of Dārfūr and Wadaī (north-west Sudan) is considered by some to have been Garamantian country. We are not yet sure about such a claim, but what is more important is the common form and contemporary date of the tombs in both areas.

When we come to the Garamantian gravestones and the offering tables, we are less sure, for the picture is not very clear. It is not impossible to find parallels to each type of gravestone outside the Garamantian lands, but it is not easy to relate them to each other. In the discussion of the offering tables, we reached the conclusion that there was strong Egyptian and Meroitic influence on the Libyan examples. When talking about the gravestones, how-

ever, the tendency was to relate those of the Wādī al-Ajal to Punic rather than Egyptian or Meroitic centres. Indeed, the so-called hand- and horned-shaped stelae do not occur in the burials of either Egypt or Meroe. So, how may one explain the combination of the so-called hand (which is assumed to represent baetylic representation of certain deities) with the table, which we have shown to have Egyptian or Meroitic influence? The same question may be asked about the horned stela and its association with tables. Such combinations have so far never been encountered anywhere other than in the Wādī al-Ajal. I am inclined to think that the Garamantes were influenced by neighbouring cultures with which they had contact. They may have also worshipped similar deities and practised rites similar to those of their neighbours. Notwithstanding the representation of these deities as baetylics, the association of stelae and offering tables is typically Garamantian. One tends to think that despite the well-documented contacts between the Garamantes and their neighbours, their remoteness and isolation are the explanation of these differences.

Still on the subject of isolation, the certain use of particular forms of inhumation, at least by some groups of Garamantes, further suggests that outside influence was not always effective in bringing about change. The crouch burial was the only type practised until, perhaps, medieval or even later times. But for all the important material and the outside influence visible in objects like the hands and tables, such aspects of Garamantian culture as the persistent use of the crouch burial, show a remarkable retention of local and individual customs.

Acknowledgement

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New data concerning the Aïr massif (Niger) and its surroundings

Marianne Cornevin

As a result of discoveries and radiometric datings published since 1976 and particularly since 1982, Aïr and its surroundings must now be considered as one of the chief areas of prehistory and protohistory, not only in the Sahara but in Africa in general.

Prehistory: the beginnings of the neolithic

Basing himself on four dates obtained since 1979 by a highly reliable method (dating from charcoals in stratigraphic archaeological layers), J. P. Roset, archaeologist from the Office de Recherche Scientifique et Technique d'Outre-mer (ORSTOM), stated in 1983 that Aïr and its eastern approaches represent a Saharan centre of invention of ceramics in the middle of the eighth millennium before our era, i.e. a centre older than the most ancient near-eastern site, dated around —7000.

Protohistory

Arrival of the palaeoberbers in Aïr

Basing himself on the two dates of —730 and —210, obtained in 1982 from charcoals taken from different samples at Iwelen, J. P. Roset also states, in his chapter on page 113 below, that the new features of pottery and rock carving, the presence of metal objects and two representations of chariots indicate the arrival in northern Aïr of 'the first of many waves of Berber immigration', the ancestors of the present-day Tuareg. This earliest dating of a rock site in Aïr constitutes a considerable advance in the history—documented solely by rock carvings—of the appearance of the Tuareg in the massifs of the central Sahara.

The age of metals in the Sahara

In 1976, P. Gouletquer and S. Bernus, an archaeologist and ethno-archaeologist at the French Centre National de la Recherche Scientifique (CNRS) published two dates which were regarded as 'surprising', namely —1360 and —90, for the remains of furnaces associated with copper slag discovered at Sekiret and Azelik in the plain of Talak, to the south-west of Aïr (Bernus and Gouletquer, 1976). Between 1977 and 1981, D. Grebenart, a CNRS prehistorian who was systematically prospecting the region situated to the south (the cliff of Tigidit) and to the west of Agadez, revealed the existence of a copper industry developed to the north of the Tigidit cliff between the ninth century before and the first century of our era; also that of an iron industry developed to the south of the Tigidit cliff between the fifth and first centuries before our era. In the synthesis he presented in 1983 in the collective work *Métallurgies africaines*, D. Grebenart states that 'the region of Agadez seems to date to be the oldest centre of metal-working in non-Nilotic Africa south of the Sahara'.

Here therefore are three spectacular results published since 1980. What a change since the time when the first and second volumes of Unesco's *General History of Africa* were written! The name Aïr does not appear in the index of place-names of Volume II; and though it is mentioned five times in Volume I, three of the references are to its geographical situation (pp. 268, 375, 605), one is an ethnological reference (the Tuareg of Aïr, p. 619), and only once is it mentioned in the field of prehistory. Even then, this consists of a simple mention in a long list of world famous sites of rock carvings (J. Ki-Zerbo, p. 656). In future editions Aïr and its surroundings will have to be included for all the stages of the Saharan neolithic. The beginning of this period (the production of the oldest potteries), or of what nowadays is more often called the neolithization process, is placed in the tenth millennium before our era, whereas in 1974 the accepted date was the seventh millennium. The historians of the post-neolithic, or the age of metals, will also have to include a reference to Aïr.

Today, Aïr and its surroundings have proved to be one of the regions which, in the whole of Africa, have yielded the greatest number of reliable datings (from charcoals found in stratigraphy) from 10,000 years before our era. Even if it is early days for a synthesis, it is possible to present the main outlines of settlement trends in relation to the relatively clearly defined climatic changes in the southern Sahara due to fluvio-lacustrine variations which are infinitely more revealing than in the northern Sahara (Durand, 1982; Durand and Mathieu, 1980; Maley, 1981; Muzzolini, 1982).

After experiencing a period of hyperaridity between —20,000 and —12,000, the whole of the present-day northern Sahara between latitudes 21° and 17° N. rapidly became covered by lakes, which reached their highest levels between —7050 and —6050. The then Lake Chad regained around

—6550 its surface area of around 290,000 km², an area equivalent to that of the Caspian Sea. This was sixteen to forty times larger than the present Lake Chad, situated in the south-west quadrant of the ancient lake. It is possible that the speed with which the low-lying areas filled with water caused the peoples who came from the south to settle first of all in the healthier mountain areas. This would explain the situation of the Tagalagal site in the Bagzan mountains at an altitude of 1,800 m (Roset, 1982), a site dated at —7380 ± 130 and —7420 ± 130; that of the Launey site in the Ahaggar, dated —7310 ± 115 (Maitre, 1976); and that of Tintorha in the Acacus, dated —7180 ± 70 (Barich, 1982). On the other hand, the two sites of Temet, layer 1, and Adrār Bous, layer 10 (Roset, 1983), dated from —7600 ± 100 and —7080 ± 190, are located on the shores of ancient lakes marked by the presence of diatomites at the foot of Mount Greboun and at the foot of Adrār Bous. All these layers are characterized by the existence of ceramics (a potter's comb at Temet) along with a type of equipment for grinding hard seeds associated with a varied stone industry. A number of other layers, often of great size and with the same characteristics, have been discovered or re-examined by Roset in the Adrār Bous sector.

Around —5550 a dry period set in, indicated by a lowering of the level of the ancient Lake Chad and the silting-up of certain valleys. From —5050 onwards the Tibesti river completely ceased to feed Lake Chad, and the rate of flow of watercourses became irregular. No archaeological site of Aïr or of its surroundings has been dated during this period.

Between —4050 and —3050, the lake spread again, reaching a surface area of 320,000 km² towards —3550 (400,000 km² towards —6550, as against some 15,000 km² today). It was at this time that the 'mid-neolithic' or 'pastoral neolithic' began, attested by more than forty sites in Ténéré and Talak (or 'Western Ténéré'). In each case the population consisted of hunter-gatherers-fishermen-pastoralists settled on the shores of lakes in Ténéré and on the banks of rivers in Talak. Today the course of fossil rivers is indicated by a ribbon of vegetation (Lhote, 1976). Large quantities of freshwater mussels, fishbones, including backbones, the bony plates of crocodiles, and remains of hippopotamus, elephant, rhinoceros, giraffe, antelope, gazelle and warthog have been found; also skeletons of oxen, sometimes still connected anatomically. The most recent Ténéré datings are around —2250; for the numerous sites around Arlit in Talak, H. Lhote has suggested similar dates, but closer together in time than in Ténéré: between —3450 and —2850. No pastoral neolithic site has been found in Aïr.

Between —1550 and —950 Lake Chad spread for the third time, on a more moderate scale; towards —1250 the shores reached a level of 260 m above sea-level (a level of 300 m towards —3500; 240 m today). This period corresponds to the 'recent neolithic' represented at Orub, to the south of the

Tigidit cliff (Grebenart, 1979), dated —1440 and at Chin Tafidet, to the west of Tegida-n-Tesemt (Grebenart, 1983), dated —1420. Stone tools are rare, and the pottery is of a distinctively individual type in comparison with that of Ténéré.

Also dated from the end of the second millennium are a few sites described as 'Sahelian neolithic' by the archaeologist who discovered them, D. Grebenart. Four sites, three of them to the south of the Tigidit cliff, dated between —1210 and —945, have yielded pottery of a very different type from that of the Saharan neolithic. The distinction between the Saharan neolithic north of the Tigidit cliff and the Sahelian neolithic to the south is related, according to Grebenart, to the arrival of different populations coming from the north (or the west) and from the south. Grebenart considers that the former were responsible for the introduction of copper working at the beginning of the second millennium, and the latter for the iron industry in the middle of the first millennium.

During the first millennium it seems certain that, while Ténéré became a desert, the interior of Aïr and Talak enjoyed levels of humidity that were much higher than today. The representation side by side in rock engravings of the horse, large 'Ethiopian' fauna (elephant, rhinoceros, giraffe, lion) and the 'Libyan warrior' is proof of this. To the south and west of the massif the existence of copper- and ironworking, which need forest cover to produce charcoal, is further proof.

In the first millennium three population groups were settled in Aïr and its surroundings. Traces of the 'copper people' and the Saharan neolithic people are found to the west and south of Agadez and to the north of the Tigidit cliff. From the beginning of the second millennium and up to the eighth century before our era they worked only nodules of native copper. Between the ninth century before and the first century of our era they developed a genuine metallurgy, with reduction of the ore. The furnaces resemble those of Akdjudjt in Mauritania, where copper ore was worked at much the same time, from the eighth to the third centuries before our era (Lambert, 1983). In Niger as in Mauretania, the ovens are located at a distance from the dwellings, suggesting itinerant artisans who produced copper at different times and in very small quantities. However, the objects worked—pins, spatulae, arrowheads, engraving tools, etc.—have different shapes, and it does not seem there was any contact between these two 'copper provinces' 2,500 km apart.

South of the Tigidit cliff, one finds Grebenart's 'iron people' and 'Sahelian neolithic people'; Grebenart thus assumes an early iron age between the fifth and the first centuries before our era (four dates ranging from —490 ± 100 to —60 ± 90). Exchanges between the 'copper people and the 'iron people' are proved by the presence of small iron objects in everyday use—pins, rods, pierced plaquettes, blades—near the copper furnaces of the first millennium; also by

the presence of jewellery made of alloys of copper, bronze and brass (cassiterite (tin ore) is worked at El Meki, 100 km north of Agadez), indicated by the green colouring of the bones of many neolithic skeletons found south of the cliff.

In the interior of the massif and on its eastern and western borders, the appearance of a new population is indicated by thousands of carvings of a remarkably homogeneous style (Lhote), which represent in codified style figures in the form of two triangles with feathered head-dresses, brandishing lances or shields—near relatives of the traditional 'Libyan warrior'. The dates —730 and —210 advanced by J. P. Roset confirm H. Lhote's suggested date of around the middle of the first millennium.

In the present stage of knowledge we know nothing of the relations between the white warriors who arrived from the north and the black metal-workers settled in the south. Oral tradition gives no help, since it places the arrival of the first Tuareg tribes and the departure of the Gobir towards what is now Nigeria in the seventh century of our era.

Another question for discussion is the origin of ironworking in Africa south of the Sahara. Even if we must await fresh datings before we are able to draw conclusions, the earliest dates published (Calvocoressi and David, 1979) for the iron age of Taruga in Nigeria (—591 ± 74), and by Grebenart in 1983 for the iron age of Ekne Wan Ataram, south-east of Marandet (—490 ± 100), have cast severe doubts on the dissemination theories put forward by most specialists.

The existence of independent ironworking centres in the first millennium before our era in the Sahel-Sudanese band of Africa (Nigeria and Cameroon) and in Nigerian Sahara seems more and more probable as archaeological research progresses.

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Iwelen—an archaeological site of the chariot period in northern Aïr, Niger

J. P. Roset

The Iwelen *kori*[1] forms part of the dense network of small valleys that channel off towards the south-west some of the rains that fall on the massif of Mount Greboun, the highest point of northern Aïr, during the rainy season, which lasts from July until September. It is fed mainly by the seasonal runoff from the southern slopes of the massif, Adrar Tessiguidil, in particular. However, as is the case with most of these *koris*, water flows in it only rarely, after a downpour and often only for a few hours during the year—a powerful torrent that is quickly absorbed by the sand.

Before it joins the Tassos *kori* to the west, which is larger and descends directly from Mount Greboun, it turns sharply south over a distance of barely 2 km: the archaeological site is in this bend, 19° 46′ 35″ N. and 08° 26′ 00″ E. (see Fig. 1).

Thus the bed of the *kori* nestles between low hills composed of weathered granite which has disintegrated into piled-up round stones interspersed with large, angular blocks of aplite,[2] a fine-grained, granite rock. It is in this chaos of stone, a characteristic landscape of eroded crystalline rock and a typical scene in Aïr, that we find a fine group of carvings,[3] spread out over several hundred metres on both sides of the *kori*, with a preponderance on the left bank.

A systematic, topographical survey of the site was begun in December 1979, in order to discover its internal layout and compare the carved panels; we came to realize that they actually formed four very distinct groups, two on one side of the *kori* and two on the other, and that on either side there were also fairly extensive settlement areas along the low terrace, beneath the carvings. Even though they were largely covered in sand, these two zones of habitation were easily distinguished thanks to identification of the traces that are usually found on the surface deposit: remains of ground grain, shards of pottery and various configurations of rocks and blocks of stone (see site plan, Fig. 2).

From the beginning, this discovery was a very important one for Aïr, since it was the first time that rock carvings—whatever the period to which they might belong—had been found on the same site as traces of any human

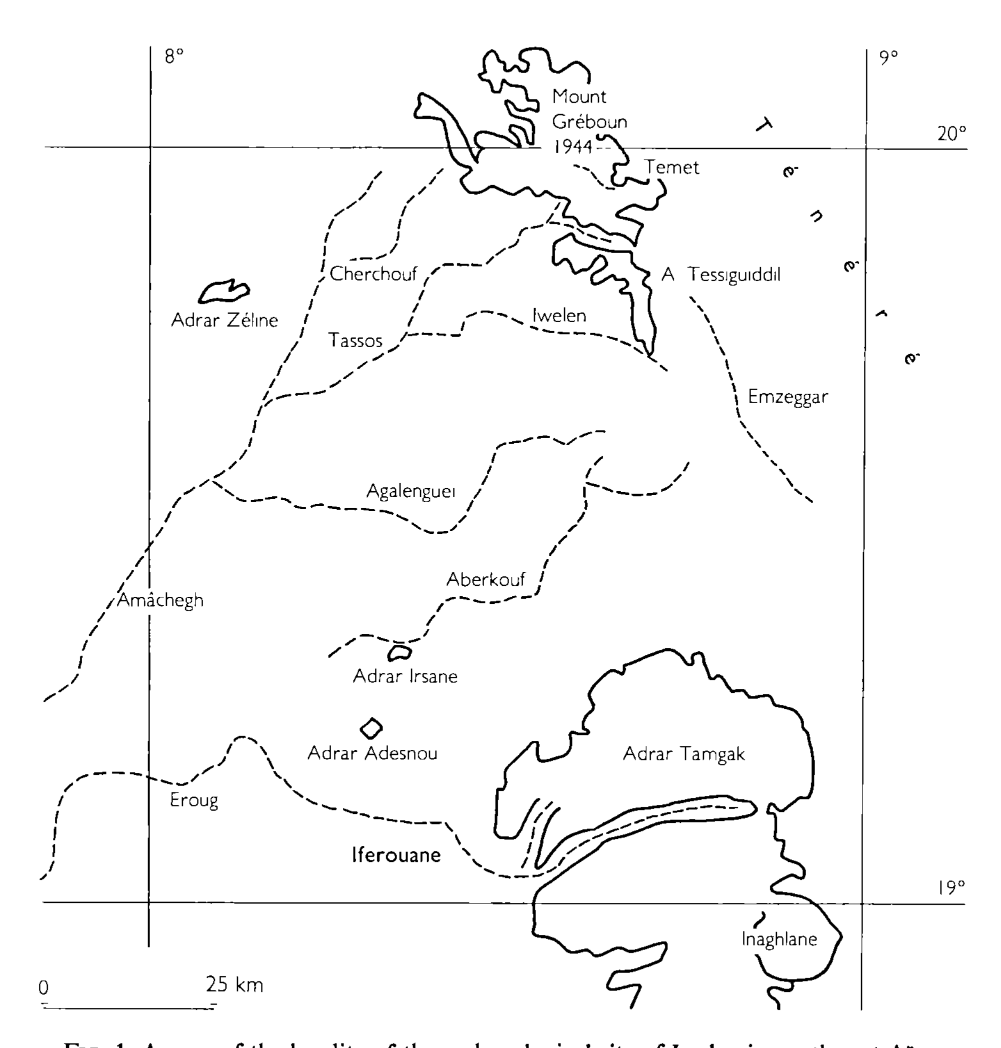


FIG. 1. A map of the locality of the archaeological site of Iwelen in north-east Aïr.

occupation. Several years of careful research including systematic examination of the vicinities of the rock carvings near the border with Ténéré and within the massif, had not produced the slightest sign of habitation; the carvings always came to light without any archaeological context. It was rather as though the populations that lived in the valleys of Aïr over the centuries had left no memorial except these engravings on the rocks—an abundant, codified and complex art, but one which cannot be related to anything, and which has no roots anywhere.

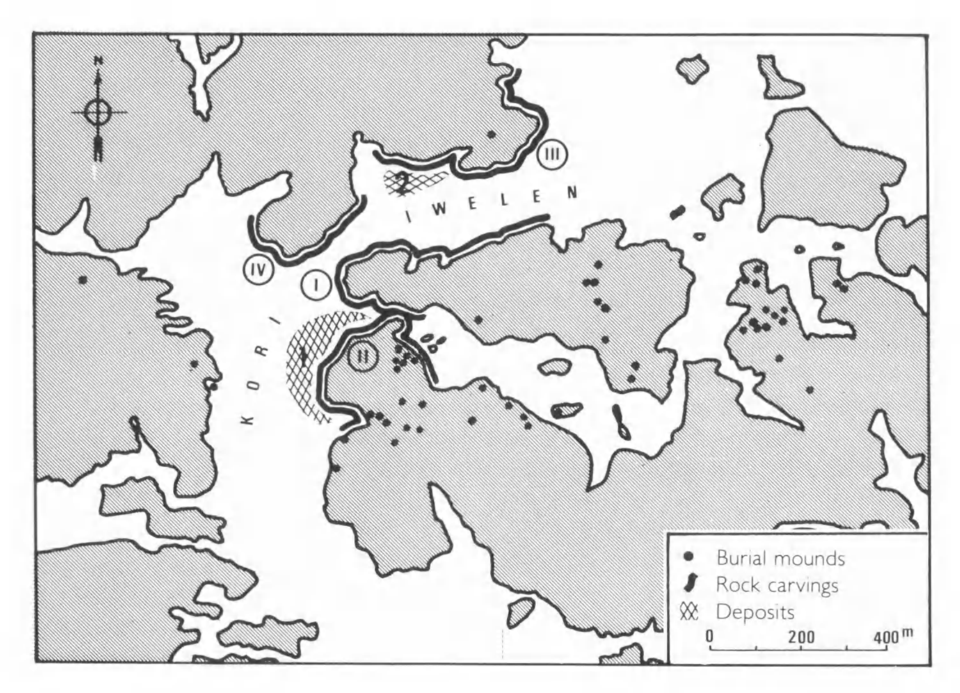


FIG. 2. The topographical arrangement of the site, in the bend of the *kori.*

This aggravating absence of accompanying remains—all the more surprising in that the number of carvings at the sites listed runs into thousands—obviously raises a number of questions on the way of life of the carvers, and on the purpose of these open-air works which are usually found, as in the case of Iwelen, stretched out over hundreds of metres along the rocky banks of the *koris.* The most important thing, however, is that it deprives the archaeologists of any means of dating the rock carvings: this is usually effected by excavation of the archaeological strata that can be associated with the decorated walls, and drawing on any vestiges of furniture as in the case of Franco-Cantabrian art, or other elements of local stratigraphy that can be dated.

The result of this is that the Aïr carvings, which certainly constitute one of the most remarkable groups in the Sahara, can as yet be dated only in relative terms. Deprived of the fixed points of reference in time that radiometrical data furnish, the identification of successive stages on the basis of criteria of style depends to an extent on theoretical concepts, and it must be admitted that, without stable supports, the construction is fragile, even though it would appear to be more in keeping than the all-purpose chronology used by some authors.

The presence of a genuine archaeological site at Iwelen would seem to offer a chance of remedying this state of affairs; during the initial excavations, moreover, we discovered a very large number of burial mounds in the locality of the carvings; they were constructed on the slopes, often in the immediate vicinity of the carved rocks and, like these rocks, they were found mainly on the left bank.

It now appeared that the Iwelen site was an archaeological entity, complete with village, necropolis and rock carvings. It had yet to be demonstrated that all these elements related to the same period.

The ancient village

It is, then, in this bend in the *kori*—and mainly, it seems, on the sheltered left bank, the inside of the bend, that people came and settled. The location of the ancient village is clearly defined at this point by the bend in the *kori* and the



FIG. 3. A view of the ancient village, at the side of the hill where the carvings are found, on the left bank of the *kori*; this can be seen in the background.

rocks that flank it to the south-east. It covers an area of approximately 3 hectares. A little way upstream and on the right bank, there is a second zone of habitation that seems to be less extensive, although the sand that now covers part of it makes it difficult to assess its real limits. The similarity of the remains found on these sites permits us to conclude that they are contemporary.

As we have said, the existence of these two zones of habitation is revealed in the first place by the presence of numerous millstones in various places near groups of small blocks of stone that also sometimes form heaps (Figs. 3 and 4). These blocks do not seem to form any visible pattern, but most of them have certainly been displaced in the gullying of this low terrace, and it can be assumed that many of them served to anchor superstructures that have since disappeared. The millstones are often wide and deep, oval in shape and made of granite like the pestles that are sometimes still to be found with them. As in practically all the sites in the Sahara that have been inhabited at one time or another since neolithic times, the implements were found either intact and usable, or broken or worn through constant use.



Fig. 4. Arrangements of this kind are common on the surface of the site; a number of blocks of stone together with a millstone.

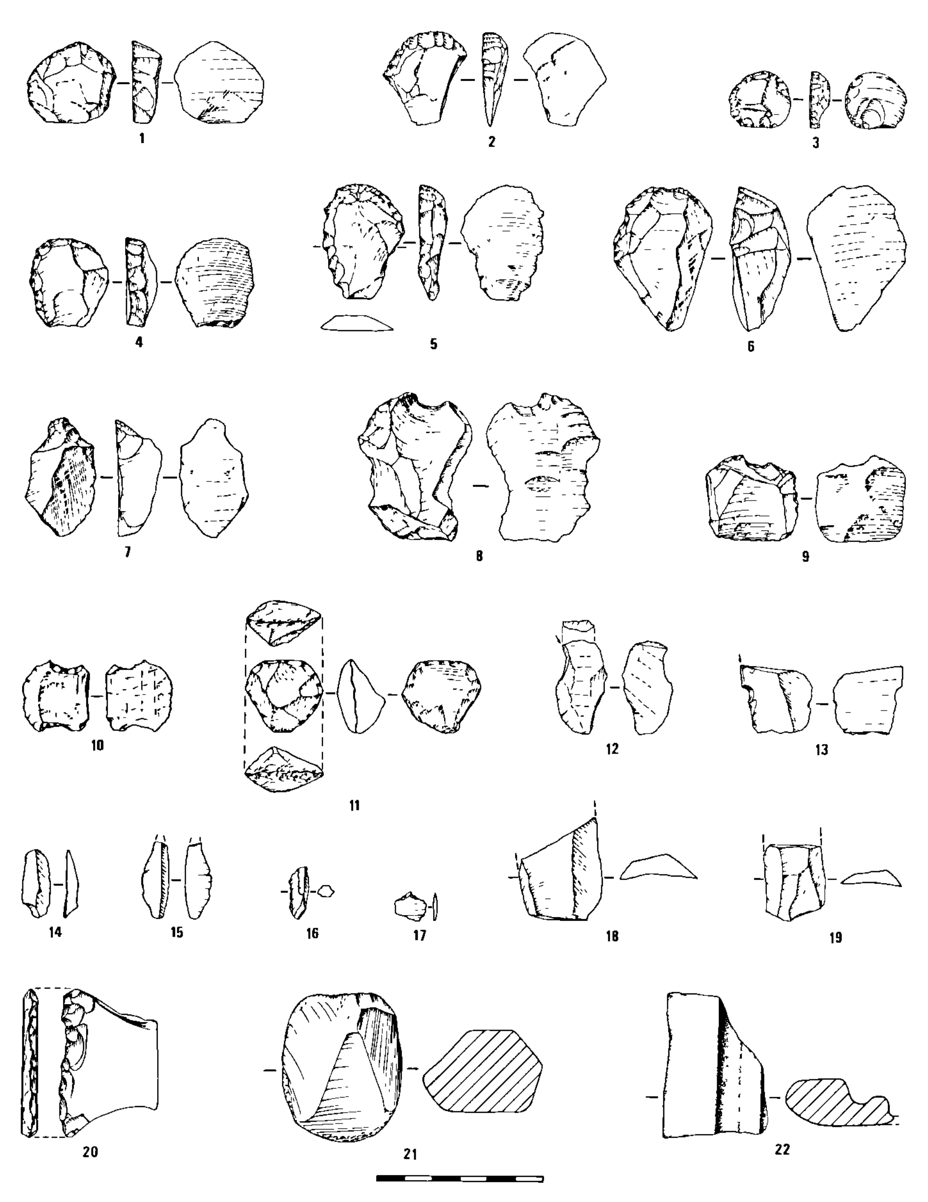


FIG. 5. The most common lithic tools on the site; all are of quartz except 20 (green jasper) and 22 (sandstone). (1–7) different kinds of flake scrapers; (8–10) single- or double-edged notched flakes; (11) a splintered tool; (12 and 13) lateral burins; (14 and 15) bladelets; (16) drill bit (?); (17) micro-perforator; (18 and 19) fragments of bladelets; (20) fragment of a knife; (21) hammer-stone; (22) calibrator of pierced discs.

These large items that attracted our attention during an initial examination are accompanied by remains that are smaller, but equally typical of the archaeology of the region: lithic tools and shards of pottery.

The lithic tools (Fig. 5) are few in number and widely dispersed; they are almost all made of quartz, which is known to be a difficult material to fashion, so that it is not always possible to distinguish tools from flakes. One category of tool, however, can be identified with certainty: scrapers occur in such numbers that they must be seen as the principal product of this industry. In fact, the frequency with which they were found shows that this industry specialized in scrapers, of a variety that is practically unique: a simple scraper, made from a flake that is often short and thick, sometimes discoidal or circular. We also found some flakes with one or two notches, some splintered pieces, a very few bladelets and lateral burins—the latter, none the less, being very clearly defined—still fewer perforators and perhaps some drill bits. It is clear, however, that unretouched flakes and shapeless stones are far more numerous than the shaped items. And yet, for the making of tools, the people of Iwelen had at their disposal the entire range of jaspers; outcrops of jasper in this part of eastern Aïr were quarried in various periods of prehistory: we think in particular of the technical masterpieces wrought by the Aterians and in their turn, the neolithic people of Ténéré, who knew how to exploit the potential of this stone. Strangely, the people in question made little use of it. The only significant examples of jasper implements discovered to date are knives made from natural slivers of the stone, bifacially retouched along one side to form a continuous cutting edge. Only about ten of these knives have been found. Finally, a fair number of hammer-stones were found, mostly made of quartz, as well as items of jewellery—fragments of various bracelets and rings made from cipolin; the presence of calibrators shows that pierced discs were made from ostrich eggshell.

As can be seen, the inventory of these lithic tools is quickly made, and it seems all the more meagre when we consider that it was spread out over a vast area. Here it must be said that this extreme paucity is not in the least unusual for a site in the interior of Aïr; it is, in fact, almost the norm for a late neolithic facies sheltered in the valleys of the massif, of which we already had had experience when coming to investigate Iwelen and which had given us consistent radiometrical datings of about —2000.[4] However, identification with this facies was soon rendered impossible by the discovery of metal objects in the course of systematic excavation of this layer during several digs that took place between 1979 and 1983.

These metallic objects were all found several centimetres below the surface. Beyond doubt the most interesting are three foliated spearheads of very thinly beaten copper,[5] each of which is tanged (Fig. 6). Their sides converge, they have blunt tips and shoulders that are either rounded or barely fashioned;

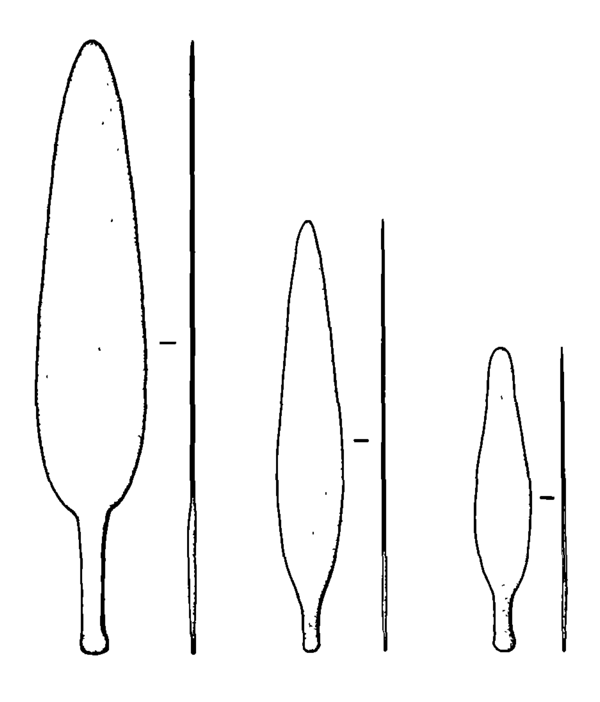


FIG. 6. The three copper spearheads found on the site. Length: 243 mm (*left*), 170 mm (*centre*), 120 mm (*right*); max. width: 44 mm (*left*), 26 mm (*centre*), 22 mm (*right*); max. thickness of point: 1 mm (*left*), 1 mm (*centre*), 1 mm (*right*); max. thickness of tang: 2.5 mm (*left*), 1.5 mm (*centre*), 1.5 mm (*right*).

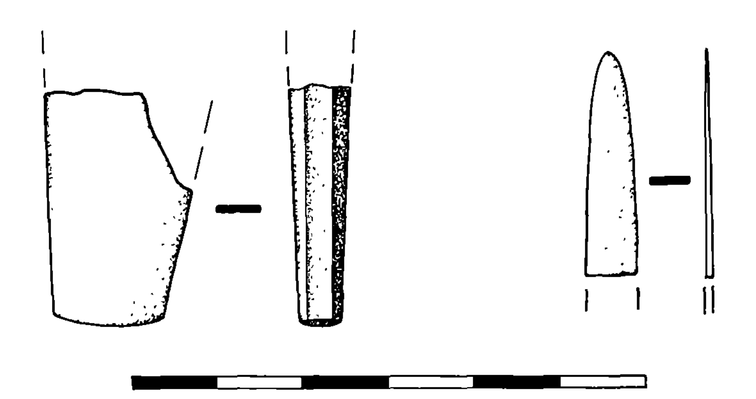


FIG. 7. The other copper objects found on the site. *Left*: the broken heel of a hatchet (?). *Right*: the distal end of a weapon.

their widest part is the third of their length nearest the tang. The junction with the tang and the tang itself are extra thick to absorb the shock of impact without breaking. Edges and tip have been burnished to give a keen edge; this is shown by the signs of grinding that are clearly visible under the microscope. These are thus very deep-cutting weapons, and they are the first metal weapons to have been found in Aïr.

Excavations turned up two further copper objects, but only fragments unfortunately: the distal end of what also seems to have been a weapon, much smaller than the others, however, and what appears to be the broken heel of a hatchet, although this, again, is by no means certain (Fig. 7).

Whatever the nature of these objects, the presence of metal on this site—despite its rarity—undoubtedly helps explain the dearth of lithic tools, which would have been used simply to complement the metal implements. It can even be surmised that stone was used only for certain specific operations: this could explain why the scrapers are always made of quartz, which allows the rapid fashioning of efficient tools.

There is, on the other hand, one category of objects that the Iwelen site gives up in much greater abundance—shards of pottery. Moreover, it is apparently their great numbers at this site that gave the *kori* its name, since the word '*iwelen*' is the plural of '*ewil*', whose exact meaning is 'potsherd', or 'fragment of pottery' in Tamachek, according to the *French–Tuareg Lexicon* by Father J. M. Cortade (p. 140). A Tuareg accompanying us had already told us of this translation and it is a fact that our survey of the *kori*, going downstream as far as the confluence with the Tassos *kori* and upstream to the foot of Adrar Tessiguidil, some 40 km in all, revealed no other archaeological site.

The pottery that features in the local toponymy has a style which in itself gives grounds for thinking that its village of origin was not neolithic. It marks a complete break with the neolithic traditions in pottery. We were fortunate enough to turn up vases that were almost intact and to be able to reassemble others from shards that were found grouped together. The initial impression that this little series probably came into being after the neolithic in the region, which was subsequently confirmed by the discovery of metal objects, was gradually substantiated as we came to know the size, shape and decoration of the various pots.

The pieces of Iwelen pottery are generally small—very small in comparison with the large and bulky terracotta vessels left by the neolithic populations who lived not far from there in the area bordering Ténéré, along the whole western edge of Aïr, especially to the north of the Adrar Chiriet. Most of them are wide-mouthed vases, the diameter of their rim being equal to or greater than their maximum diameter: small round-bottomed bowls are the most frequent, of a simple cap-like shape, with rims that are straight or slightly in-turned (Figs. 8 and 9). When a straight rim is slightly in-turned the bowls

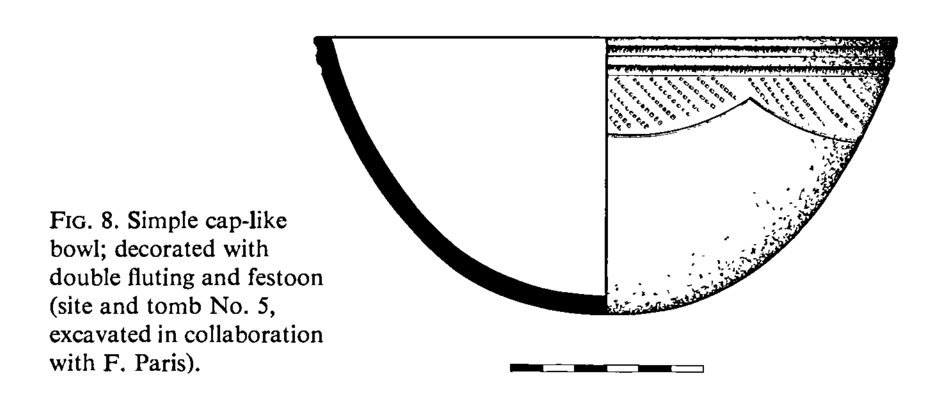


FIG. 8. Simple cap-like bowl; decorated with double fluting and festoon (site and tomb No. 5, excavated in collaboration with F. Paris).

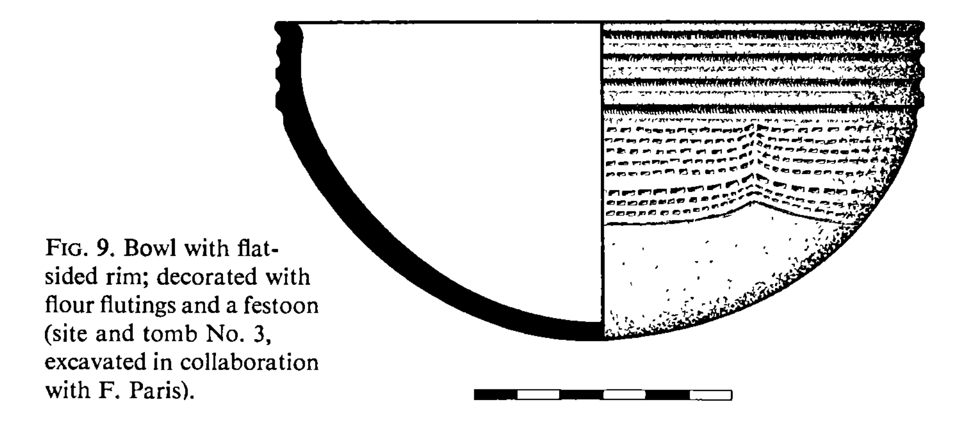


FIG. 9. Bowl with flat-sided rim; decorated with flour flutings and a festoon (site and tomb No. 3, excavated in collaboration with F. Paris).

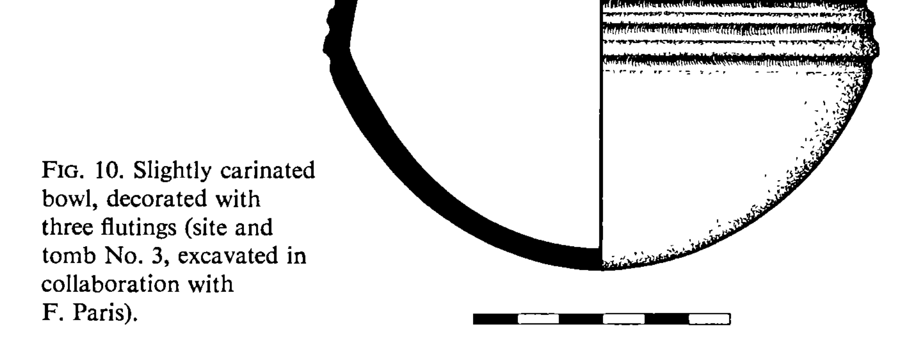


FIG. 10. Slightly carinated bowl, decorated with three flutings (site and tomb No. 3, excavated in collaboration with F. Paris).

are clearly carinated (Fig. 10), and we note their harmonious proportions, the depth always being roughly equal to half the diameter of the rim. The carinated form is found in vessels that have a much wider mouth, where, for example, a concave side is combined with a cap-like base (Fig. 11). Also characteristic of the collection are deeper, wide-mouthed pots with a flared rim giving the vessel a marked bell shape (Fig. 12).

Vessels with a narrow orifice (the diameter of the opening being less than the maximum diameter) were found in smaller numbers; all those that have been found until now have a continuous curved line. Simple, flattened ellipsoids are the most common (Fig. 13); apparently less common are vessels with a neck, the neck being mounted on a body with the ellipsoid profile: this forms a flared-neck pitcher narrowing at the junction of neck and body (Fig. 14). The rims of these vases are rarely thickened; exceptions are a few large vases that have a well-decorated rim; the lip is either round or flat.

It would be out of the question to describe in this preliminary article all the patterns we have come across on the vases: this will be part of the definitive publication of the findings of the excavation. Here we shall simply draw attention to a style of decoration that appears for the first time in Aïr at Iwelen and which, in both its originality and its abundance, characterizes all of the ceramics produced here; it is, so to speak, a trade mark.

This new kind of decoration is partial, being applied to the upper part of the recipients, near the opening, and it features various combinations of flutings, festoons and incised bands.

The flutings are more often found on the open vessels. They are usually external and superimposed on the edge, immediately beneath the lip; there are up to four on each vessel, separated by striae of equal width. This is the full extent of the decoration of a number of bowls (Figs. 8–11). The bell-shaped vases have a double fluting that it always on the inside of the flared rim (Fig. 12); this is the only example of internal fluting we have come across.

Beneath the lowest fluting on the bowls and the large, deep plates, there is very often a festoon decoration that continues regularly right round the vessel. In many cases the festoon consists of thin, unbroken lines in the clay, the intervening space being filled in a variety of ways. The fill-in patterns are always made with a comb and are slanted either to right or to left, the slant being uniform on each piece (Figs. 8 and 12); alternatively the stippled pattern follows the curve of the festoon in several parallel lines (Fig. 9).

A very effective variant of this same motif, also done with a comb, although with no stippling this time, is obtained simply by pivoting the comb slightly during the marking process to produce narrow V-shapes, with their bases together, in two festooned areas on either side of a narrow plain band which becomes the focus of the desired effect. A horizontal line stops the pattern where the curve of the vessel begins (Fig. 11). There can be no denying

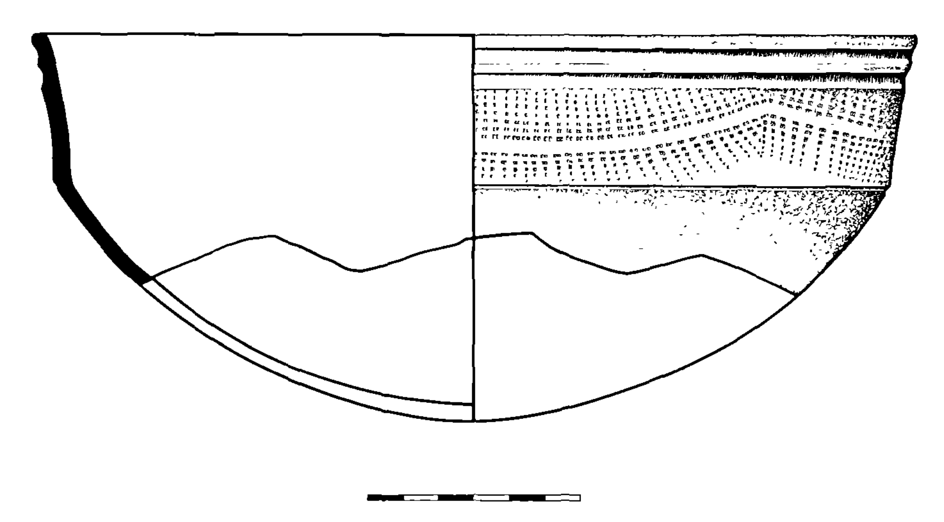


Fig. 11. Large, carinated plate, decorated with double fluting and festoon (site and tomb No. 29, excavated in collaboration with F. Paris).

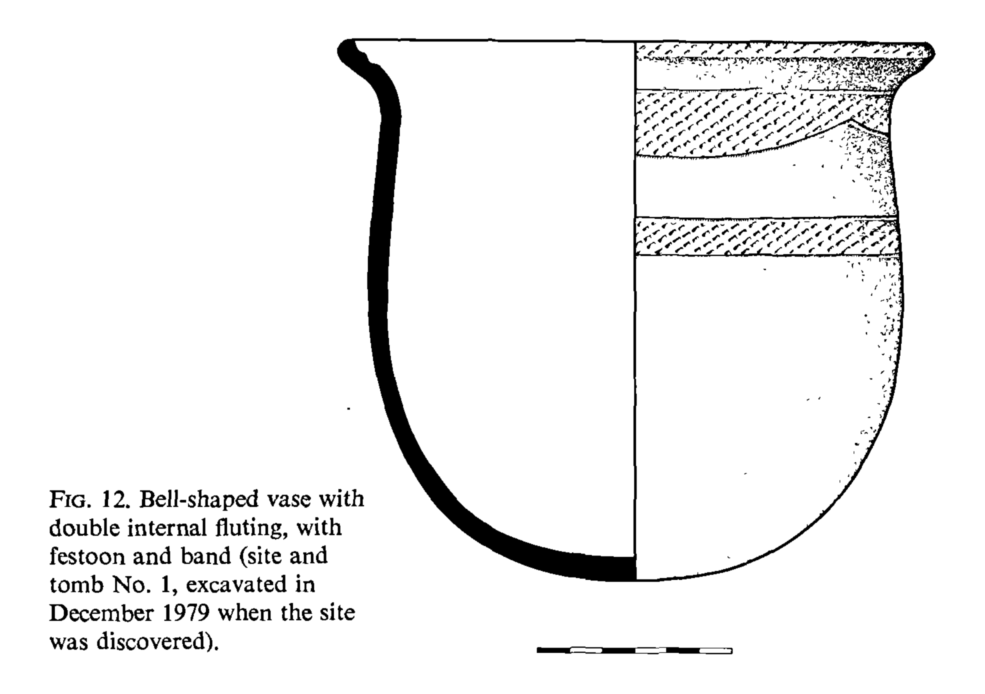


Fig. 12. Bell-shaped vase with double internal fluting, with festoon and band (site and tomb No. 1, excavated in December 1979 when the site was discovered).

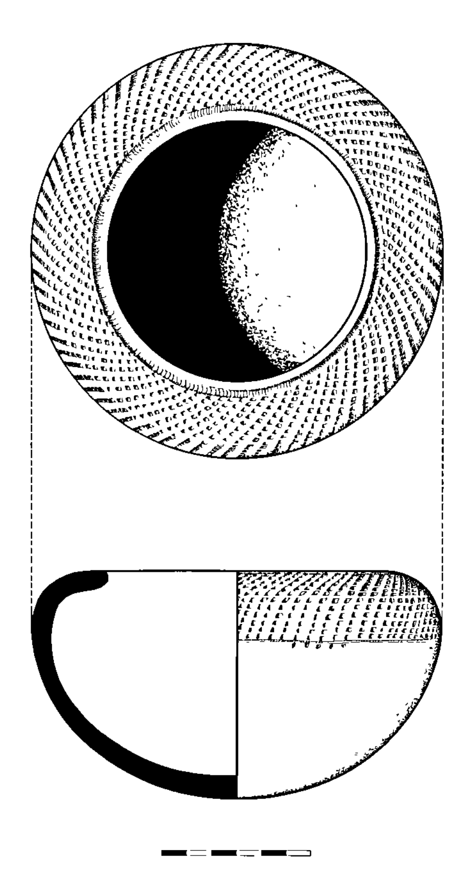


FIG. 13. Narrow-mouthed vase, very similar to the bowls, with slanted, radiating decoration; the only known example was found in tomb No. 3 (excavated in collaboration with F. Paris).

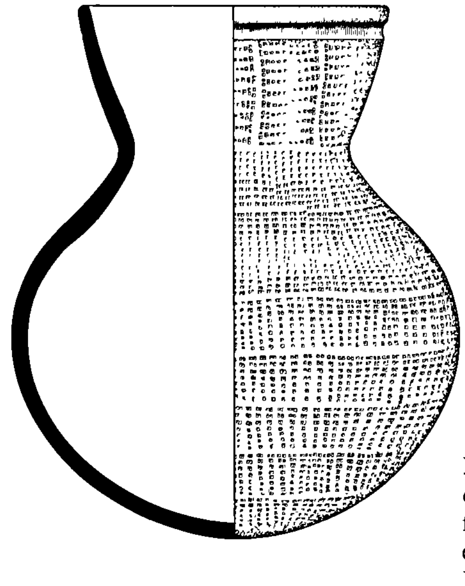


FIG. 14. Jug with a flared neck; overall decoration with single fluting (site and tomb No. 52, excavated in collaboration with F. Paris).

that the lightness of such decoration is in perfect harmony with the elegance of these shapes that are only slightly carinated.

This concern for a style of decoration that we might describe as light and delicate reveals, in our opinion, the aesthetic of the Iwelen potters. The simplicity of the ornamentation on the bell-shaped vases, which is to be seen on all the vases we have found, bears out this view. There is double fluting on the inside, and the external decoration on these cases is arranged in three horizontal areas, each made with direct, right-slanting comb impressions: first the lip, then the classic festoon motif at the level where the opening begins to flare out, and finally a narrow band just below this, and that is all (Fig. 12). When the decoration covers the whole pot, there is evidence of a desire to break the monotony that inevitably arises from the repetition of the same motif, by employing a variety of devices: for example, the V-decorations on a pitcher made by pivoting the comb slightly are arranged in horizontal rows on the body of the vase and are set point to point or base to base with the motifs in the adjacent rows, a narrow plain band separating them; the same rows on the neck, however, are arranged vertically (Fig. 14). Such inventiveness is far removed from neolithic conceptions!

These ideas, which mark the renewal of ceramic decoration in the region, find their most perfect expression in a little vase, which is the last item in our rapid survey and which, in our eyes, is a consummate example of the integration of form and decoration. It is a flattened ellipsoid with a narrow opening (Fig. 13); its in-turned rim has a slanted comb pattern radiating from the opening, when seen from above, giving the impression of a circular movement—a particularly successful kinetic effect which is, as far as we know, quite unique among the ceramic decorations of the southern Sahara. The pattern is bordered by a horizontal line at the maximum diameter and, below the lip, by a much deeper line.

It would seem that all these vessels were made from coils of clay on moulded bases, using a tournette: the regularity of the panses, openings and flutings testify to this. The composition of the clays is being analysed at present.

All the pieces described above, coming from the surface layer of the left bank or its subsoil, have been dated by the radiocarbon method. Dating was carried out on coals taken from hearths that were discovered in the source of various surveys, by the Laboratory of Hydrology and Isotopic Geochemistry of the University of Paris-Sud. Two results were obtained on different occasions: —2160 ± 50 and —2680 ± 40. The gap of approximately 500 years between these two radiocarbon datings has not yet been explained satisfactorily; a third attempt at dating is in progress.

The necropolis

The excavation of the first monumental tomb, which we carried out as a preliminary operation when the site was discovered in December 1979, established the contemporaneity of the necropolis and the archaeological site. We had the good fortune to discover in this tomb a bell-shaped vase that was absolutely identical to the ones we had discovered more or less intact on the site of the ancient village. The link thus formed between the archaeological remains was therefore solid and the relationship between the deposits and the necropolis was established once and for all.

As we said at the beginning, the burial monuments are found in the vicinity of the rock carvings, immediately behind the site—those, at least, that we found on our first visit to Iwelen. Most of them are large tumuli with a crater top, raised on the level parts of the hillside or at the bottom of the little valleys that wind among the granitic crests. They are found either alone or in groups of up to three or four, but never more than that.

The one we excavated, henceforth referred to as tomb No. 1, was selected



FIG. 15. Tomb No. 1, excavated in December 1979; archetypal tumulus with flattened cone and crater, built here at the foot of the hill with the carvings.

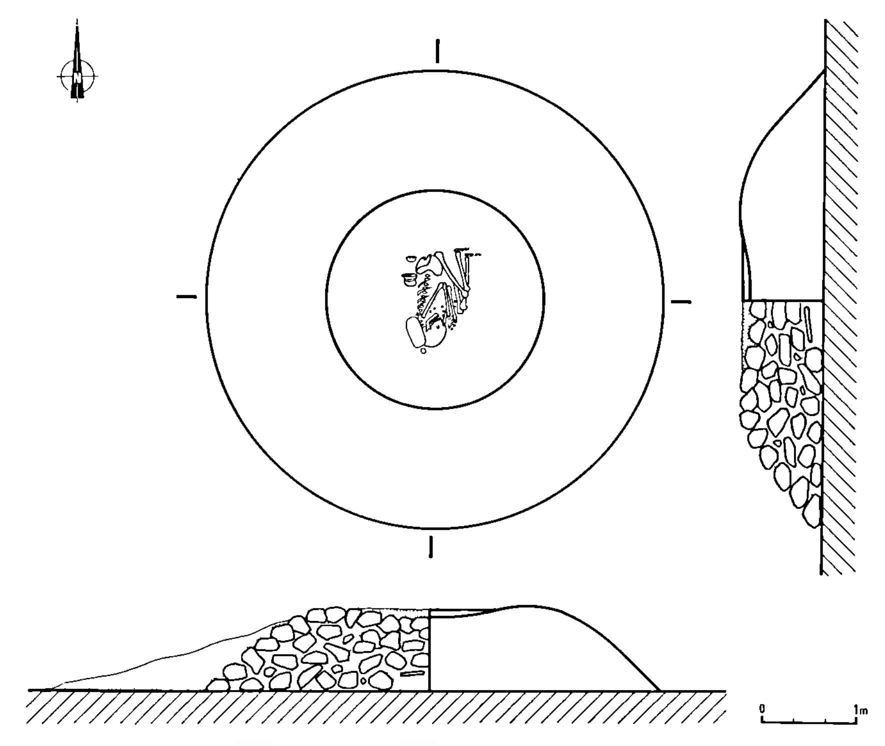


Fig. 16. Plan and oriented sectional elevations of tomb No. 1.

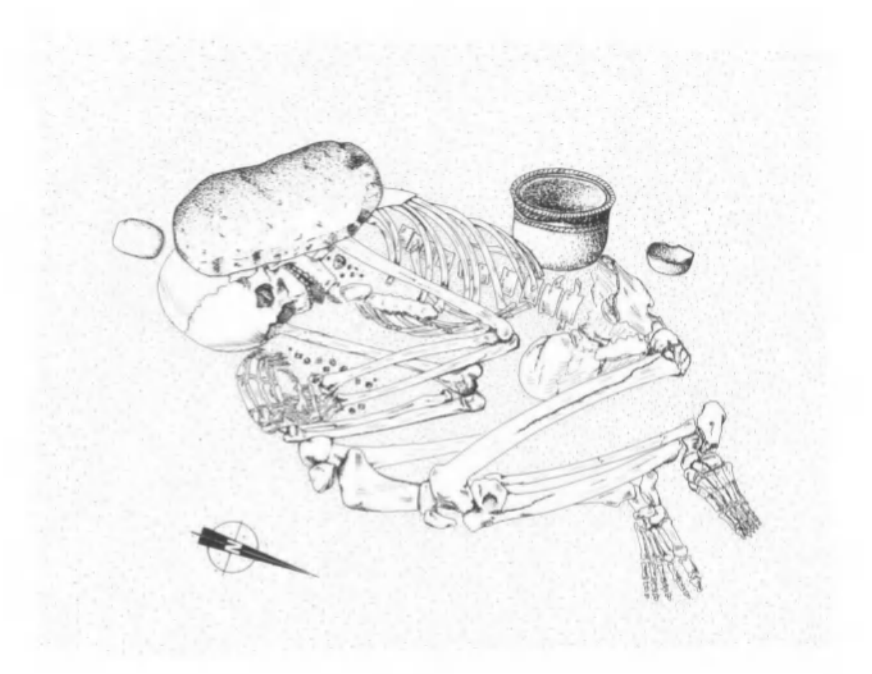


Fig. 17. Reconstruction of probable position of burial; the ornaments and funeral furniture are shown in the positions in which they were found. The bell-shaped vase is drawn intact.

because of its modest size and ease of access, being situated at the foot of the hill (Fig. 15). It is a classic tumulus shaped like a flattened cone, approximately circular in plan: its north–south and east–west diameters measure 4.9 m; and its height is 0.9 m. The west side, which is exposed to the wind, is sanded up, as is the hollow in the middle, which is also circular (diameter 2.3 m approximately) with a flat, shallow bottom 15 cm deep at most (see plan of tomb, Fig. 16).

Dismantling showed it to consist entirely of shapeless rocks of various dimensions that had been gathered on the hill and piled up without any apparent order. As is the case with all the tumuli at this latitude in the Sahara, the rocks are enveloped in a dusty sediment which we consider to be genuine mortar. There is no grave, so that, when the last stone was lifted, the body was immediately to be seen; it was lying on the ground at the level where the construction begins.

The skeleton was in a very bad state of preservation, some bones were mere marks on the sand. This is explained by the fact that the tumulus is situated at the bottom of a slope, where it catches all the water that runs off the slope, thus sustaining the damage observed. As far as can be judged, the body had been buried in a huddled attitude (Fig. 17), lying on its right side, with the hands resting between the head and the knees; the legs were certainly folded one over the other. The head was to the south and what remained of the vertebrae and the pelvic bones indicate a north–south axis for the spinal column.

It is obvious that these few remains, which could not be photographed *in situ*, have no anthropological value. The interest of the burial site is to be explained rather in terms of ethnology: the ornaments and objects found near the skeleton provide interesting information on the burial rites practised at Iwelen in the last few centuries before our era.

The ornaments (Fig. 18) consist of beads and pierced discs, in two adjacent groups: one is in the area that must have been occupied by the mandible and the cervical vertebrae, and probably form the elements of a necklace (one large, argillite bead, two small beads of cornelian and seven pierced discs cut out of the shell of a small mollusc); the other group is against the hands and consists of nine large, cylindrical beads made from an amorphous, translucid silica and one cornelian bead, which must have formed a bracelet. All the beads have biconical perforation. The simplicity of these elements leads us to suppose that the dead person was buried with the ornaments of everyday existence.

The objects around the skeleton are also interesting—and we may say, rarely found in a burial mound in the Sahara. In the first place there is the bell-shaped vase (Fig. 12 and 17) which was discovered broken, the fragments in one spot at the level of the pelvis, behing the spinal column; the vessel was therefore placed behind the body at the time of burial. Since it was possible to reassemble the vase almost completely, only a few fragments having been

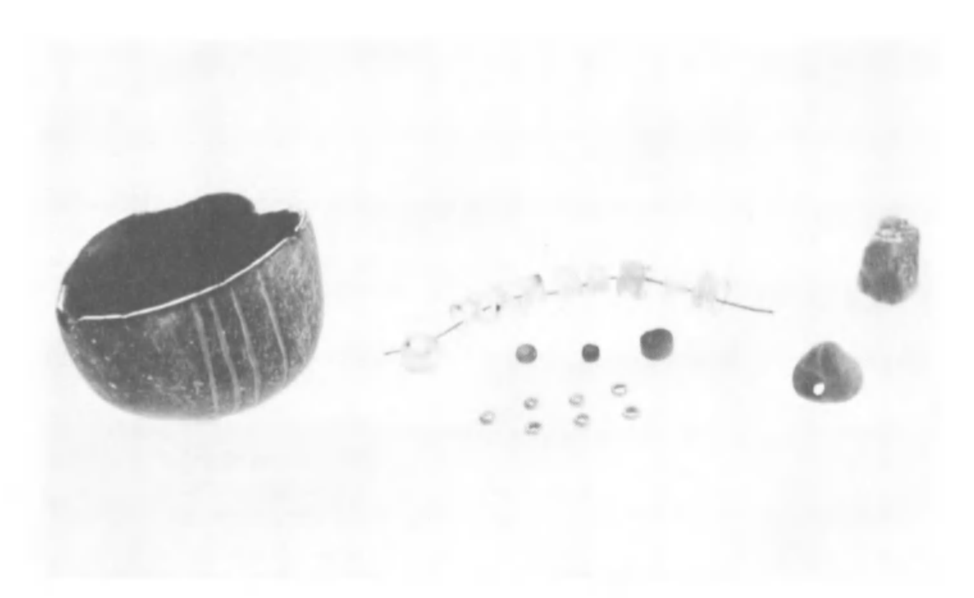


FIG. 18. The ornaments and objects of the deceased; the tiny block of amazonite is on the right. On the left, the small talc schist cup.

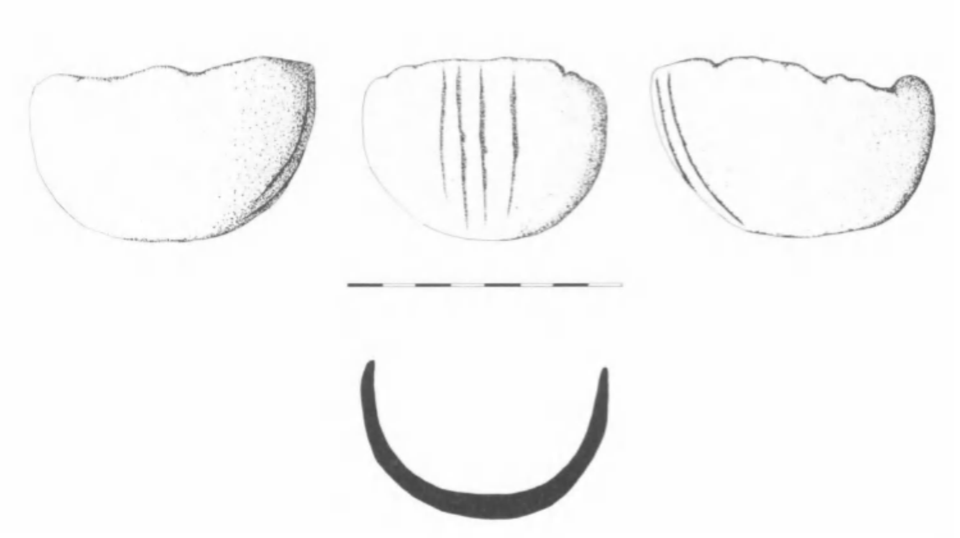


FIG. 19. The small talc schist cup, front and side.

destroyed by corrosion, it can be assumed that it was intact when it was placed in the tomb. Also touching the skeleton, and near the vase, is a small, oval cup made of talc schist, carefully polished and decorated with four parallel, vertical incisions (Figs. 17, 18 and 19). A second group of objects is associated with the upper part of the skeleton: a long, narrow and flat millstone (38 cm by 23 cm; average thickness 3 cm) made from gneiss was placed upside down on what was once the head and left shoulder (Figs. 17 and 20); splinters of skull and shoulder blade discovered under the millstone leave this in no doubt. Just behind the place that the skull must therefore have occupied lies a little granite pestle (Figs. 17 and 21).

Two more objects, which we hesitate to classify as either ornaments or furniture, were found with the skeleton. These are a small piece of amazonite that has been roughly squared off, found in the vicinity of the spine or the ribs (Fig. 18) and a strange piece of cut flint that can be compared to the pummel of a stick (Fig. 22) and whose function is a complete mystery; it was found at the level of the knees.

The observations made while the tumulus was being dismantled allow us, in conclusion, to form a fairly precise idea of the process of burial: the body—we do not know whether or not it was wrapped in a shroud—was probably placed in a hunched position on its right side on a flat area, on a north–south axis, with the head to the south. Everyday ornaments were left with the body. The various objects that are described above were left on or near the body, which was then covered with blocks of stone that were apparently piled on top of the body and held together with a mortar composed largely of sand and clay. The tumulus has the overall shape of a low, truncated cone with a hollow on the top in the shape of a very wide, shallow crater; it must be understood that this crater—a term that describes it aptly—is part of the architecture of the monument, and that it is not the result of subsidence in the centre of the structure.

The importance of this preliminary excavation led us to draw up a complete programme of study of the necropolis, in conjunction with the Institut de Recherches en Sciences Humaines, Niamey. This programme gave rise to several expeditions between 1980 and 1983. Today more than fifty burial mounds have been excavated, in collaboration with our colleague F. Paris, an anthropologist from ORSTOM. The materials brought to light confirm the contemporaneity of the ancient village and its necropolis; they constitute an important new body of information on burial practices, the material culture and the physical aspect of the populations that lived in the north of Aïr around —500. A publication on all the findings of these excavations is being prepared.

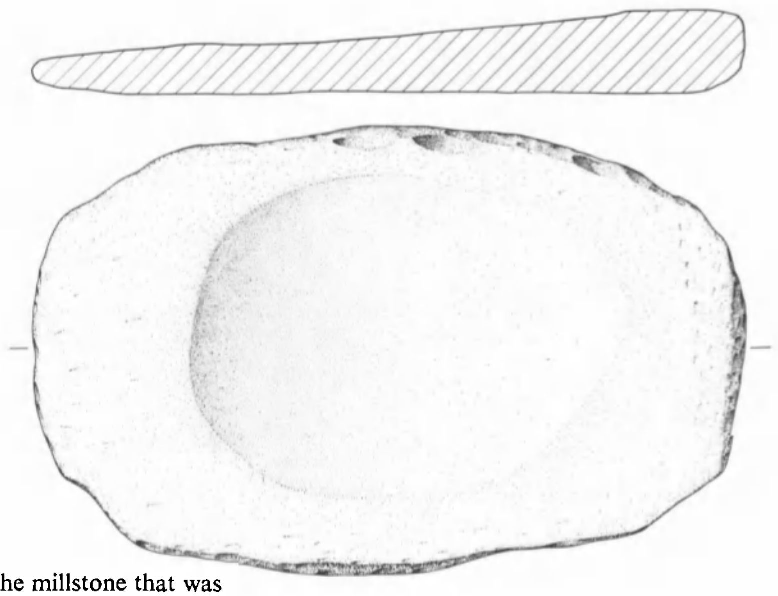


Fig. 20. The millstone that was upturned on the skull.

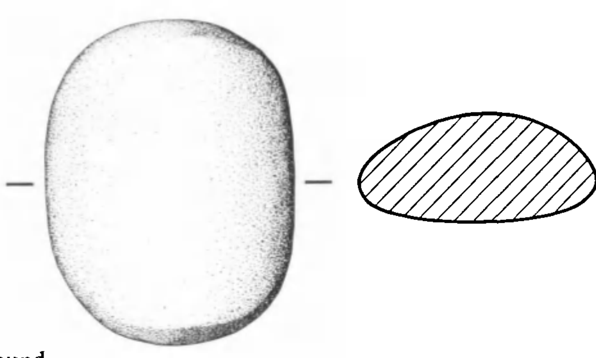


Fig. 21. The small pestle found behind the skull.

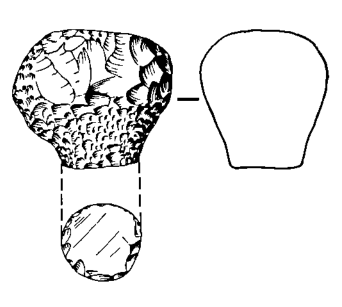


Fig. 22. Unidentified object in cut flint resembling the pummel of a stick.

The area of the rock carvings

As was mentioned earlier, a further aim of our research was to establish a second link with the area of the rock carvings. The various investigations described above enabled us to enter the often astounding world of these works, of which there are hundreds at Iwelen, and here too we believe that our efforts were successful.

The main impression gained of these carvings when one first climbs over the rocks to discover them, is probably one of great unity of style. The homogeneity of these representations is perceived on two levels: first, at the level of the entire site, on surveying these areas on both sides of the *kori* which contain such a wealth of carvings, areas separated by spaces which, as we pointed out, allowed the site to be subdivided into four secondary sites, all of which show the same inspiration; secondly, within each of these circumscribed groups, where easily identified extraneous elements are very rare indeed.

Detailed study of the exhaustive surveys made of the site did not subsequently modify this first impression; it served, in fact, to confirm the initial impression on the basis of analysis of the works themselves, going from isolated figures to groups of figures (looking at the methods employed and the way in which the rock is used for the carving, studying forms, compositions and constructions), and examining significant associations leading towards the definition of themes. This procedure, directly inspired by what Professor A. Leroi-Gourhan has been teaching at the Collège de France since 1969 (Leroi-Gourhan, 1969–82), produced results that will become known when all the findings concerning the Iwelen site are published (these are now in preparation). Here, we shall describe only those aspects of the research which allow us to place Iwelen within the chronology we have proposed for the rock carvings of Aïr and to indicate the main features of the artistic contents of the site.

Man is at the centre of these pictures, which are organized around him. The figure is conventional—a stereotype that is particularly powerful as the vast majority of the depictions of human beings that we found present the same appearance. The figure is standing and the image is strictly frontal (Fig. 23), with an exaggerated, tulip-shaped head with three points, two of which usually have an extension like a thin antenna that droops down to one side. The arms are held out from the body and bent, while the legs are straight. The limbs have no thickness, the hands are represented by a few spread fingers, and the feet are shown in profile, out-turned. The figure is dressed in a short tunic pulled in at the waist to produce a silhouette which in many cases is simply a shape composed of two triangles. A vertical axis of symmetry emphasizes the perfect duplication of the two halves of the figure, which is completely static. This geometric depiction traced with extreme simplicity



Fig. 23. Stylized representation of a man armed with a spear with a foliated head.

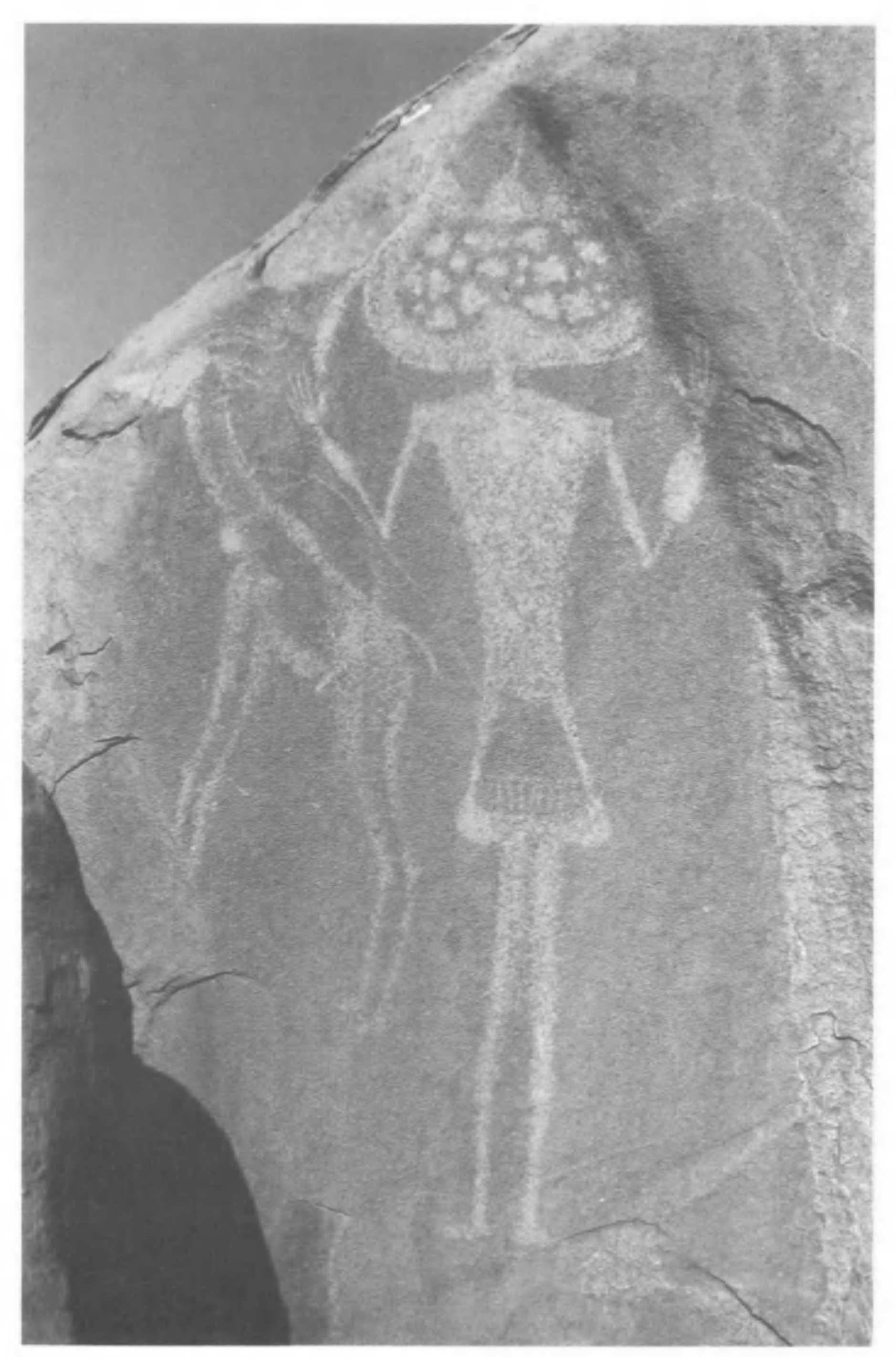


FIG. 24. Figure without a spear, much less common in representations of humans; the hands are drawn with care, and the forearms have some kind of sleeves, which is equally rare. Note the patterns that fill in the tulip-shaped head, a feature which is common. The man has a dama gazelle on a lead.

and, with no moulding, is achieved by surface pecking of the rock of varying degrees of density and uniformity. Paradoxically, it is in the heads, whose abstract forms show all the mystery of the convention, that we find the greatest variety of filling: uniform pecking, partial or total absence of treatment, openwork, checker-work stippling—it is almost as though the artist's inspiration found some freedom here (Fig. 24).

Most of the figures are warriors. They sometimes carry a small round or rectangular shield and they are always armed with a single spear (Fig. 23). The ubiquitous image of the spear, often of exaggerated proportions, which is sometimes even depicted by itself on the rocks, seems to have been a major preoccupation of the Iwelen stone carvers. Tracings were made of a considerable number of these carvings in order to compare the spears with the copper weapons found at the site and we discovered that exactly the same, rather idiosyncratic, foliated form is frequently to be seen in both the carvings and the actual weapons. This correspondence is clearly a serious argument in favour of the contemporaneity of village and carvings. In the course of our successive study trips to Iwelen we even came to anticipate the discovery of the copper spearheads—which were not found until later on—because, as our survey of the rock carvings progressed, it became less and less likely that the omnipresent images represented stone weapons, of which, in fact, no examples were found on the site of the settlement. We were, in fact, almost certain that the weapons in question were not made of stone, because we had noticed a few wide-based triangular spearheads, also frequently seen in the carvings, with a very clearly drawn central rib (Fig. 25).

The warriors are combined with chariots, of which there are two carvings on the site (Fig. 25). These chariots are similar in construction to most of those known to us in eastern Aïr, in that they have a yoke. Eight such carvings have been discovered to date: we published details of the first discovery, in *kori* Tagueï, in 1971. At Iwelen, however, the more detailed of the two chariots (Fig. 26) does not provide all the detailed information we might wish to find on the nature of the yoke, because the animals drawing the chariot are too small and stylized to be identified with any certainty. At least we can state definitely that they have no horns and that they have a fairly long tail. We believe them to be horses, especially when they are compared with another chariot carving found in the Iférouane region (*kori* Emouroudou, results to be published), in which the vehicle is driven by a figure with the characteristic head and is drawn by two perfectly recognizable horses. The structure of the chariot itself is clearly visible: it is a vehicle with two wheels that are composed of hub, spokes and a simple rim, and are linked by an axle. A single pole or shaft begins at this axle. Between the wheels, forward of the axle, is a narrow platform; to the rear is a double structure resembling two rails. There is no driver and there are no reins, and it is not clear how the horses are attached



Fig. 25. Hunt scene with giraffe and chariot. We use the term 'hunt' in our analyses of the carvings wherever the spears are pointed at wild animals, as here. The central ridge of the spearhead means that the weapon is probably of metal.



Fig. 26. The chariot; the representation corresponds to a stereotype in eastern Aïr.

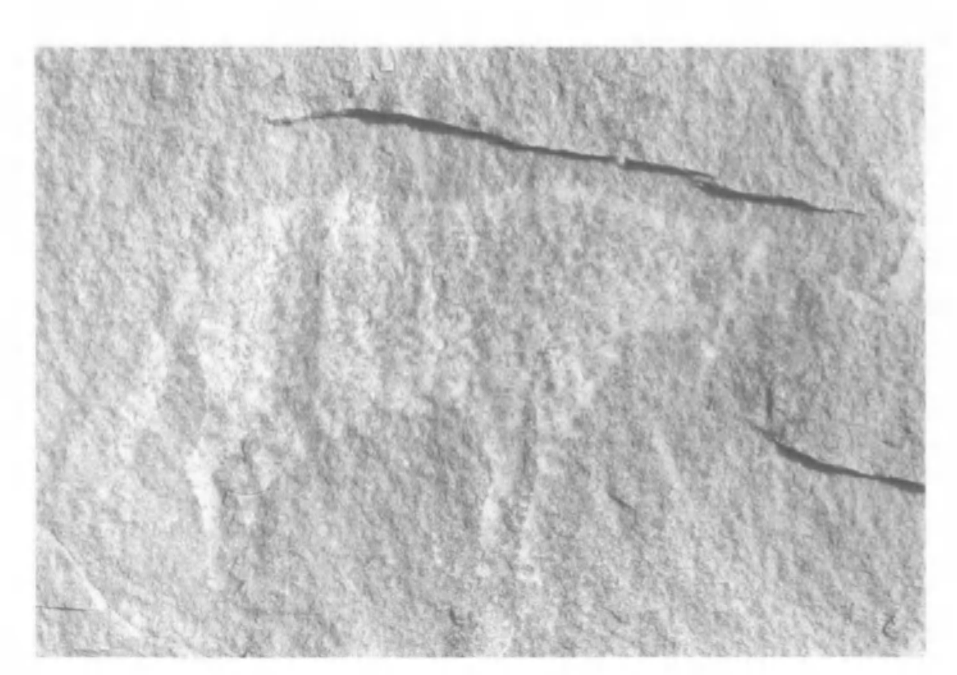


FIG. 27. Horse.



FIG. 28. Man and ox; the ox is in distorted perspective, with horns drawn head on and the body in profile.

to the shaft: it simply touches their heads. The depiction of all the elements in one plane is characteristic of the series: horses and wheels are mirrored one above another in a space without depth.

There are almost no pictures of horses by themselves at the site, which confirms an observation frequently made concerning the chariot period in the literature on Sahara rock carvings. There are only a few such pictures, and yet they are immediately recognizable because all that goes to make the profile of a horse has been so well observed and depicted (Fig. 27). The same can be said of most of the representations of animals at Iwelen: the way the contours are drawn makes for immediate recognition of the species. The carvers have given more than the minimum outlines, and study of the bestiary they have left reveals clearly both their desire to reproduce the visual reality of the animal forms and—perhaps to an even greater extent—their desire to express the essential character of the animals, by means of bold simplifications which are often carried to extremes.

There are very many instances of cattle represented in this way—the theme of man and ox is constantly repeated (Fig. 28)—as well as a great number and variety of wild animals: giraffes in a row or in scenes where they are certainly being hunted with a spear (Fig. 25), massive elephants and rhinoceros (Figs. 29 and 30), powerful lions with exaggerated claws (Fig. 31), ostriches which are no more than two running legs (Fig. 32), and fine-muzzled antelopes perched on fragile legs. One of these, which is recognized easily by its white head and hind quarters as a dama gazelle, recurs so frequently that its significance cannot be denied: carved either on its own or suckling its young (Fig. 33), the latter being one of the finest carvings we have seen in Aïr. The animal is most frequently in the company of a man, who has secured it with a line that is fastened round its neck (Fig. 24).

The twofold concern which guided the hand of the Iwelen artists did not always help them avoid the use of rigid poses in their carvings, which often lack any suggestion of ease, and it helped them even less to avoid the use of stereotypes in their depiction of the animal world. This moderated and expressive realism in fact produced conventional, invariable stereotypes of animals, just as the phenomenon of geometrization inevitably fixed the figure of man in symmetry: there is a way of drawing a giraffe, an elephant or a gazelle which is rarely departed from, and which is reproduced *ad infinitum* on rock after rock. The result is that the hills around the ancient village constitute an immense gallery of pictures most of which look as if they were copied one from another.

These, therefore, seem to be the broad features to be noted in an initial description of the Iwelen rock carvings, which, it will be noted, include no written inscription.

This very codified manner of expressing forms corresponds to an original



FIG. 29. Elephant.



FIG. 30. Rhinoceros.

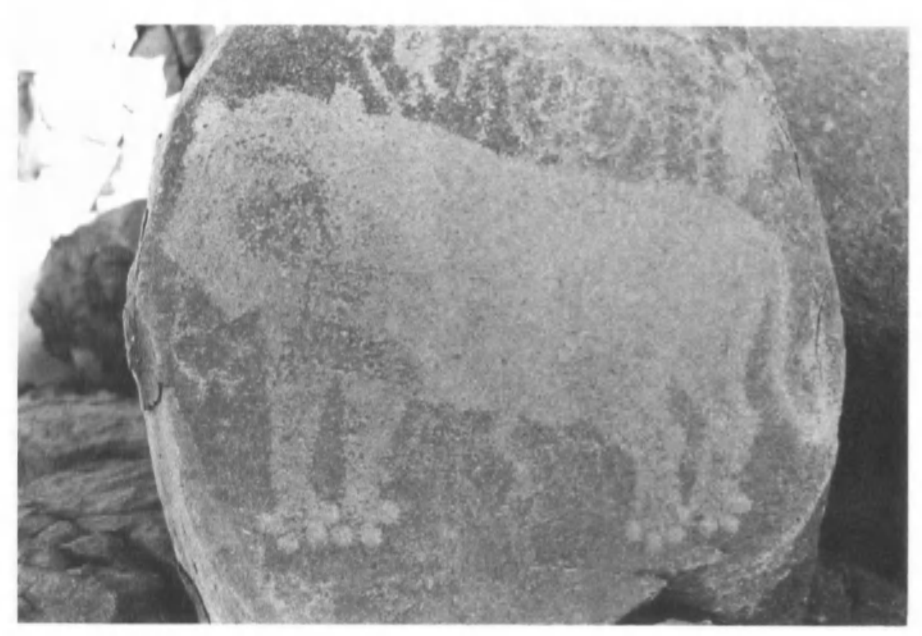


FIG. 31. Lion.

system of thought which appears in Aïr at the same time as the chariots. We detect no link between the style of carving for which Iwelen can serve henceforth as the reference site and another, very different style, noted in a very small number of carvings found in only one place in ten years of research and which, in our opinion, belongs to the only period of art in Aïr that is unquestionably anterior to the Iwelen site. We drew attention to its existence in 1971: it is in a small *kori* on the eastern side of Takolokouzet known as *kori* Tamakon, and lying a little to the south of Iwelen. This is a beautiful set of carvings whose style and content, grouped round the figure of a shepherd in a long cloak, may be said to belong to the pastoral period. This group, to which nothing elsewhere corresponds, has not yet been dated, but it exists, and there is therefore a clear break in the chronology. It is probable, too, that a fairly long interval separated the two periods.

After Iwelen, on the other hand, there was to be no hiatus, for, with the appearance of the chariot drivers, a system of representation began which was henceforth to govern the whole trend of rock carving in the massif. This art was to become increasingly schematic in its approach, and it suffered through the gradual disappearance of wild animals as the area became a desert, but the basic forms that are to be seen at Iwelen interrelate all subsequent works down to the most recent and constitute the permanent foundation of their inspiration. The last inheritors of this tradition were probably the Tuareg, at



FIG. 32. Ostrich.

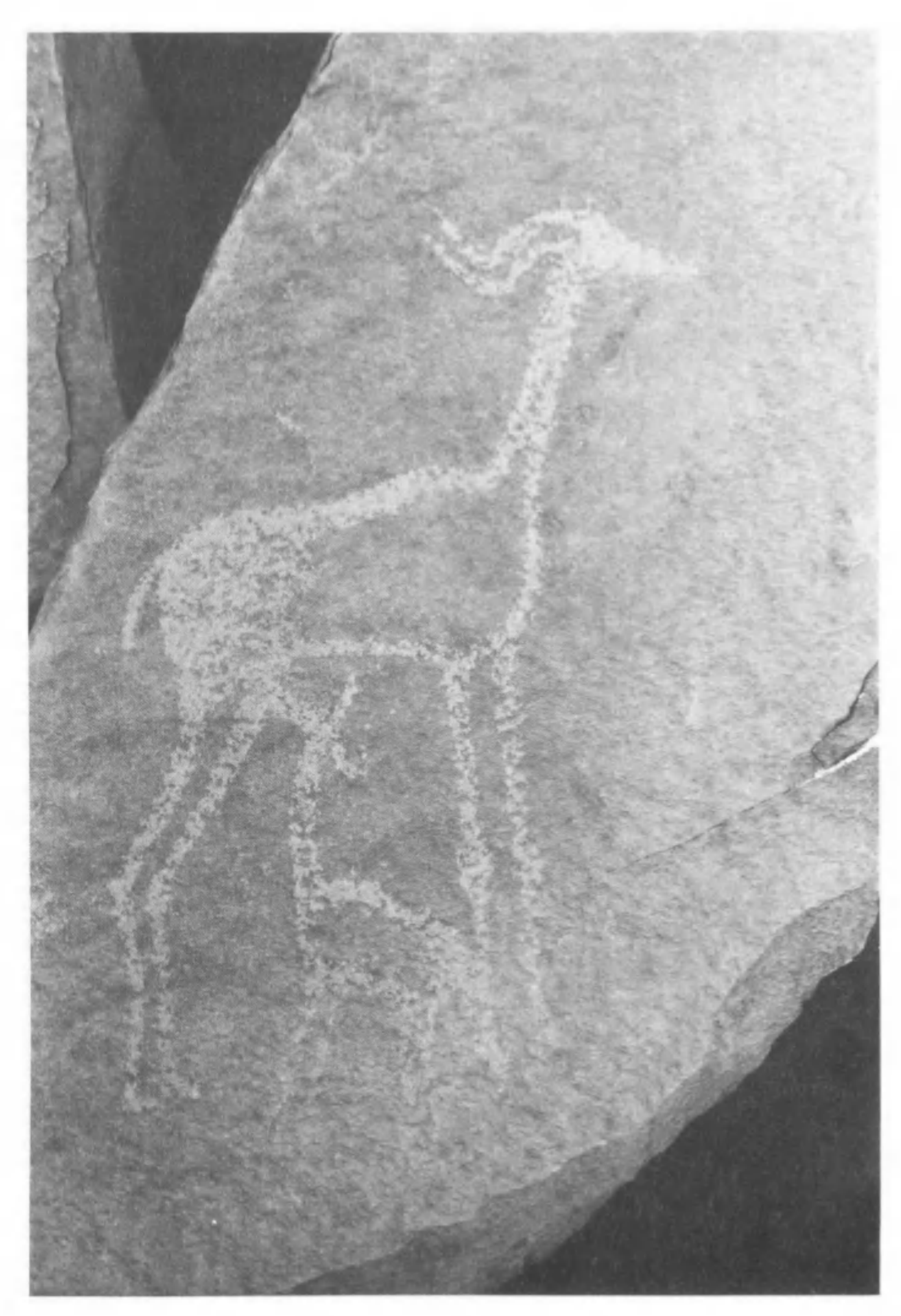


FIG. 33. A dama gazelle suckling its young.

some point in the past which we cannot yet specify, but which cannot be too distant.

Whatever the future has in store for research in this field, it is clear that at Iwelen, where the line begins, we are simultaneously confronted with two identical phenomena: a completely new style of ceramics and a completely new art style which we may consider, until we have proof to the contrary, to have had no precedent in the area. Their existence at the same site, and the link established between them by the knowledge of metal and its use in weapons, a link which is indisputable in one case and highly probable in the other, encourage us to see in them two contemporary aspects of a single archaeological reality: the arrival of a new population in the Aïr massif.

We extended our prospecting systematically over a considerable area whose centre was the Iwelen site, along the *kori*, as mentioned earlier, northwards up the little valleys which lead to the foot of Greboun and southwards for a similar distance of about 20 km. The results of this reconnaissance were negative as regards both sites and carvings, with the exception of a few new carvings in the same style found at several locations in *kori* Tassos. The archaeological isolation of the site constitutes in our view a further argument in favour of the contemporaneity of the site and the carvings. A difference in time is more difficult to imagine because, if it is assumed that the site was occupied at two different periods, then it must be considered that it was occupied first by a population of assiduous stone carvers who were working far from their bases or who left no trace of their passage other than their art, and then later by a population that did no rock carving but established a sizeable village there and buried their dead among the rocks, content to admire the works of art left by their predecessors. This hypothesis somewhat stretches credibility. Furthermore, the chronological sequence of a dual occupation could not be reversed, since one burial mound excavated in collaboration with F. Paris was found to contain stone blocks with carvings.

Finally, the first two radiocarbon datings obtained for the site, —2650 ± 40 and —2160 ± 50, are perfectly acceptable for the rock carvings, which they place, for the moment, within the period to which they might be assumed to belong. It will be noted that they correspond to the ages suggested by P. J. and C. A. Munsen (1969) for the ox-drawn carts of the villages of Bled Initi and Taidrart II in Mauretania, whose datings are —2600 ± 110 and —2430 ± 105 respectively. And, if we look at these results in the context of the southern Sahara's palaeoclimatic evolution whose main stages in the Chad and eastern Niger basin we know thanks to the work of M. Servant (1973) and J. Maley (1981) in particular, we see, on the other hand, that the occupation of Iwelen began when we would not have expected, during a period of aridity which these authors place between a lacustrine transgression in Ténéré—still fairly pronounced at this juncture—that occurred between —3550 and —3000,

and a last, weak return to damp climatic conditions that occurred in about —2500 in this area. What kind of climate prevailed in Aïr at this time? It can reasonably be assumed that the massif was less affected by drought than the empty expanses of Ténéré and that the large animals of the savannah subsisted without too much difficulty in the valleys of Aïr between the last two optimal climatic periods that preceded our present era.

Such are the facts which lead us to believe that the Iwelen site is all of a piece, and that there are no grounds for separating its archaeological elements. We make no attempt to disguise the fact that the arguments which persuade us to link the rock carvings with the village and the necropolis are not so firm as the evidence that establishes the contemporaneity of the village and the necropolis, but they are our sole means at present of approaching the truth and, such as they are, they seem to us a sufficient basis for our—provisional—belief. Counter-arguments that are more securely founded could lead us to change our opinion, but for the moment we can find none.

It would not be too bold to suppose that these people, who were settled on the slopes of the little *kori* from the end of the seventh century before our era, were palaeoberbers. The osteological material collected from the tombs should permit F. Paris to determine their features. Furthermore, the varied archaeological evidence we have so far collected in the massif and on its border with Ténéré also seems to point to the conclusion that they were the first of many waves of Berber immigrants who came to live in Aïr during the first centuries of history; the Tuareg represent the last wave. It seems to us self-evident that these users of chariots, who had copper weapons, used this metal in the construction of their vehicles; for those who know how difficult it is to penetrate into the eastern foothills of Aïr, where the rocky plains are left behind for the soft sand of the *koris*, it is impossible to believe that chariots without any metal reinforcement whatsoever would have run for very long, whatever might be said on this point.

The greatest significance of the Iwelen site, however, is that here, at last, the charioteers become associated with a material culture which they completely lacked until this discovery. There is also the hope of tracing, perhaps, through their pottery, where these people originated.

Notes

1. *Kori*: dry valley, wādī.
2. Identified by C. Moreau, University of Yaoundé (Cameroon): to be precise, a chloritized biotite aplite.

3. F. Sauvage, then a geologist with the Société des Mines of Aïr, told me of their existence; he himself noticed them while out walking.
4. Study of these layers and publication of the findings are in progress.
5. Metallographical analysis will determine whether it is copper or bronze.

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Prehistoric rock art in the Libyan Sahara: the result of a long biocultural process

F. Mori

The most ancient works of rock art in the Libyan Sahara seem to appear suddenly among the traces of man's cultural activity. Their dating is to this day the subject of controversy, but it seems reasonable to have doubts about their 'neolithic' age. It seems probable to me that the most remote manifestations such as the engravings of the 'large wild fauna', scattered throughout North Africa, should be placed chronologically in the final phase of the Pleistocene. They appear in number and are extraordinarily beautiful. They are to be found on the rocks of this vast region, although it has not been possible, to this very day, to identify a 'body' of work which could have preceded them; their sureness of planning and execution, and the regular harmony this produced, are themselves eloquent indications that their appearance must be considered the outcome of a long preparatory process of which every trace has disappeared. The hypothetical date which places them on a chronological parallel with the great 'palaeolithic' works of the European continent, seems more probable if the dating obtained from two fragments of rock, painted with animal figures and found *in situ* in the South African settlement of the Apollo 11 grotto, is valid. The radiocarbon process has placed these between —25,500 and —23,550. If all this evidence were to be confirmed by other datings similar to those obtained with radiocarbon in the Tadrart Acacus at the south-west border of Libya, or by the adoption of new methods, an unexpected picture would emerge: a more correct vision of the so-called 'birth of art'. This would then acquire a polycentric character and be seen as a result of a series of similar biocultural transformations, in the two 'Old World' continents where traces are found and many apparent gaps could be filled. Spoiled as we are by old schemes we automatically see a lack of evidence as negative: I ask myself in fact, how it can be reasonable to affirm that, in Central Africa, people of the late Stone Age did not paint at all when it may simply be that the perishable material on which their work was done has not survived. Binford (1970) increases this perplexity by asking if the finding of an artistic testimony in the 'empty zone' between the Sahara and South Africa, does not invalidate the whole hypothesis of the 'artistic' gap between these two regions. Far-sighted words at a time when,

as already mentioned, the paintings found and dated in the Apollo 11 rock shelter, throw a different light on the research into prehistoric African rock art.

A similar reasoning could be adopted with regard to the eastern Mediterranean basin in which there are very few examples of prehistoric artistic production. The enormous mass of evidence existing in the Sahara could not have been isolated: with regard to the Nile valley, the engravings of Kom Ombo would suffice (Smith) to prove wider spread than would appear to be the case from the concentration of the most ancient works of art on the map. The same may be said of Catal Huyuk, where wall-paintings of —7000 are comparable in style with some Saharan works. So why exclude the possibility that vast areas of the 'fertile crescent' participated in that new means of communication whose development in the massifs of the Sahara may be attributed to the presence of deep wādīs and sheltered places which may have favoured settlements and incipient ritual practices?

This leads a more vast area of evidence than could be supposed to more general considerations. The 'phenomenon of art' may have its history in populations who have left no traces of it: a plausible outcome for the majority of our ancestors of a biological and cultural evolution, in a way not unlike what may have happened during the laborious birth of speech. In the same way, the stages of development remain to be discovered in the series of structural and functional transformations which have led to the emergence of modern man and which are linked to the history of physiological adaptations and the specialization of knowledge. It is useful to remember that language itself, progressively more articulate and complex, may be considered to be the vehicle of those technological acquisitions which characterize continuous progress through the exchange of information and which parallel the development of the capacity of the nervous system and the brain (Ragghianti, 1981). That this could be a theoretical effect common to many, if not all, the groups of our species diffused over the face of the earth, seems equally reasonable. It would seem then that all peoples have the same biological potential for the development of a culture and the acquisition of speech. 'We must therefore admit', Lenneberg (1971) says, 'that the evolutionary events which favoured culture and speech date back to the common ancestry of all modern human groups. In other words, the appearance of speech may be dated between 30,000 and 50,000 years ago.' The probability of this hypothesis is not based purely on the study of evidence obtained from anthropological studies; the cultures associated with the fossils of this period demonstrate, in fact, the development of a symbolic means of communication other than speech: graphic representation. The cave paintings of that time reveal remarkable ability and, what is more important, they are highly stylized and even in a sense abstract. It is therefore likely that the cognitive processes of the Cro-Magnon could have

had a certain number of characteristics in common with modern man. Nor is it to be excluded that speech is much older than we thought.

It is nevertheless very difficult to identify the forms in which oral communication as opposed to gestual became manifest and the links between communication and the development of social activities which accompanied the history of our predecessors from *Homo erectus* onwards. In fact the techniques which accompany the more direct economic activities seem to indicate a close communication network. Hunting became more efficient with the use of fire; this permitted more diversified eating habits and these had both a biological and social significance, which has so far been underestimated. Other group activities, such as the establishment of more satisfactory settlements and the occupation of different ecological areas, increase to the point where one sees the human species expanding into unexplored latitudes. Other activities, already mentioned, are an indication of a precise development towards abstraction: the reasoned use and application of the geometry of solids which, even if empiric, still require a certain degree of 'theoretical' background. This may be a stage in the phylogenetic history of thought which preceded articulated speech (Vygotsky, 1966), but the cerebral organization of the species which preceded *Homo sapiens sapiens* appears, without doubt, to be developed enough in the stages preceding the first manifestations of art, to render acceptable the idea of a slow acquisition of symbolic language which at the end of this process manifested itself in signs drawn on the faces of the rocks. These earliest traces, lost to us because they were executed on perishable materials such as wood, or animal skins, or raw clay, or even because they were corporeal decorations, would be of major interest as a starting-point of 'artistic' activity. We continue to use the term even though it may have led to more than one equivocal interpretation. It suffices to remember the first interpretations that were given, at the beginning of the century, of palaeolithic rock paintings; in the name of 'art for art's sake', works which had in fact complex functions and cultural structures were viewed as being merely aesthetic. We must guard against such an interpretation when considering the aforementioned signs; and if their disappearance prevents our discussing them, let us study the surviving paintings in order to understand mere fragments of what the awareness of the found instrument must have signified for man.

The first works, engraved or painted, must be studied in the light of the importance that they must have had for the group or groups who witnessed their birth. Man had gradually discovered symbolism. Equally slowly he was discovering the possibility of transmitting this to other members of the group by means of signs which, because they 'retained' and at the same time 'communicated' a concept or a number of concepts, acquired a value which surpassed, perhaps, that of all other forms of behaviour which were more directly linked to the satisfaction of biological needs. With the gradual appearance of

needs beyond the sphere of eating and reproduction, but linked in some way to the safety factor, which psychologists and biologists consider equally fundamental, a network of social relations was developing. It had to be accompanied by an adequate system of communication. The oldest surviving manifestations of a symbolic activity, which nevertheless must have had a strongly utilitarian function, are those which we call 'artistic productions'. Surely we are conscious that such a definition already implies our concept in thinking that we know what is and what is not 'art'. Such an interpretation implies our assumption that those ancient creators of graphic signs were conscious of 'making art' while on the contrary it is highly probable that they were not. The concept of 'art' is something which has been formed historically, in a particular society, out of a certain type of cultural production. All we can say, beyond the precise semantic definitions, is that those cultural products, which we classify as 'works of art', are set apart from all that material activity which is directly associated with the 'practical' aspects of living and surviving. They so constitute a 'body' on their own, even if this must be re-examined and studied in the wider context of other facts which biological and cultural evolution have proposed as instruments of a more subtle and varying way of adaptation to the environment. If that 'body' must be set in the system of values and classifications which we have organized and which today is indispensable to us we must recognize, with Graziosi (1956), that 'the art of humanity, at the moment in which we can gather its first manifestations, has already every right to be named as such'; but it must be clear that in their historical and cultural context, those works must certainly have had extra-artistic functions and capacities. Their impact on the transmission of ideas, which is no longer simply oral or gestual, is, in my opinion, comparable only with those other great steps which have marked our progress, from the first tools to the use of fire, from this to the cultivation of plants and the domestication of animals.

The works of rock art constitute the first vehicle for the graphic expression and survival of notions which through an indeterminable series of observations, perceptions and experiences, had been accumulated by groups who were fully aware of the importance of their intercourse with nature. They enter into the world of language and enrich it with the variety of 'senses' which can be given to each sign; meanings which are certainly arbitrary, but perhaps only relatively so, as the same form, the same structure of the engraved, sculpted or painted object, the 'model', must have limited the field of possible choices. These choices can be perceived in different sectors of the same work and they may have influenced all the variable components and all the phases of production: the engraving technique with shallow or deep incision, the colour in the painting, the dimensions of a figure, its attitude and place in its surroundings, its combination with other figures and other signs.

This is a traditional way of reading and interpreting, in which the fixed

component, and the most important, is represented by the figure itself; but we certainly cannot exclude that the other components mentioned earlier and which seem to us to constitute a framework of 'invariables' to which an unknown code gave profound meanings. We should be equally prudent in considering the apparent link between technique and subject; it is enough to mention it in order to emphasize the value and the complexity that those first images must have had for their authors and for those who would have seen and deciphered them. They constitute, for the culture of our times, quite valid evidence of the level of abstraction reached by certain groups in the final part of the Pleistocene; this new form led to the recording, for succeeding generations, of classes of objects identifiable in the environment and classes of experiences such as emotions and hopes. It seems to provide proof of the importance of the irrational for those men: in this context, all the images that it was possible to create, have been used; from the 'pre-logic' contradictions to the mythical significance of the image and the numerous interpretations which other authors have acutely analysed (Ucko and Rosenfeld, 1967). Nevertheless, one thing is more than a probability: that the groups were already sufficiently well organized to produce images which are inconceivable in social situations without a well-defined order, and they were certainly not far from that equilibrium 'bioma-culture-habitat' which Clark (1955) emphasizes as fundamentally important for socio-economic adaptation. In its turn, the new revolutionary instrument, which enabled the accumulation of information in ways other than traditional, must have accelerated their cultural evolution. It is certain that the nobility of the 'forms of art', the collections of ideas which we will never be able to decipher, is an indication of the 'spiritual' world which inspired them, and we may therefore conclude that the populations of the prehistoric Sahara must have reached a high cultural level.

Prehistoric art is rightly considered to be the first evidence of written language and it is almost sure that through the several different forms of its development writing was born. Hence a fundamental instrument for the development of our history benefited perhaps from genetic mutations: this may render less surprising that explosion which, in the brief period from the end of the Pleistocene to the beginning of the Holocene, witnessed the passage from an economy based upon hunting/fishing/gathering to a productive economy with all the decisive consequences this involved.

From the genetic point of view biologists would never expect, as Young (1974) says, 'such rapid changes in so short a time, unless man had developed some special mechanism of selection and evolution. It is acceptable to think that, with the development of a method such as language to transmit information, the selection of individuals who were competent in its use became unusually rigid'. The speed and quantity of communications transmitted rapidly improved: these in their turn, stimulated new ideas which as they

became organized helped if not to improve the quality of life, at least to reduce its dependence upon nature. For nature can at last be described; the new instrument allows it to be analysed and statements about the new relations that can be established with it are made.

It is not impossible that the basis of the cultural mutations which led to the slow acquisition of 'control' over animals and plants is hidden in these earliest works of rock art.

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Libyan nationalism and foreign rule in Graeco-Roman times

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It may be misleading to use the term 'nationalism' in the sphere of ancient history. What is meant here is the Libyan resistance to the foreign occupation which forced the indigenous tribes and groups to withdraw from the fertile coastal plains.

It is not altogether true to claim that when the Phoenicians came to Tripolitania about the eighth century before our era to establish their markets, and the Greeks to Cyrenaica in the seventh century to found Cyrene their first colony, they found the coastal plains desolate and unpopulated.

Prehistoric sites have been discovered everywhere in Libya.[1] In the second millennium, if not before, the names of Libyan groups appeared in the Pharaonic inscriptions and there are drawings in Egyptian reliefs as well. Among these names we may mention chiefly the Tehenu, the Temehu, the Libu and the Meswesh. The latter two groups pressed hard on the western boundaries of Egypt trying to find refuge in its lands. Pursued by the sea people they spread terror and destruction as they passed. The Pharaohs of the XIXth and XXth Dynasties succeeded in driving them back to their homeland inside Libya.[2] The expedition of Pennsylvania University in the spring of 1963 tried to find in Cyrenaica traces of the Libyans of the Bronze Age. The memory of those Libyans is well preserved in the Egyptian records. They acted as intermediaries in the commerce between Africa, Egypt and the Aegean Sea.[3]

We owe a great deal of our knowledge of the Libyan tribes to the '*Libykoi Logoi*' of Herodotus which were included in the fourth book of his Histories. Some of the criticisms of Herodotus are clearly justified, but most of his data concerning the Libyan tribes remain valuable and indispensable. He recorded the names of the tribes, defined their geographical location and all that is interesting to anthropologists wishing to study their religion, customs and social life. As far as this study is concerned, it is very important to find out their relations with the foreign people who occupied their lands and prevented them from approaching the coast.

Herodotus gave the names of the tribes in the following order: Adyrmachidae, Giligames, Asbytes, Auschises, Bakales, Nasamonians, Psylls, Macae, Gindanes, Lotophagi, Machlyes and Auses.[4]

When the Dorians came with Battus to found a colony in Cyrenaica, the native Libyans at Aziris helped them by offering to guide them to the place where they succeeded in founding their colony, Cyrene (—632).[5] The Libyans of Aziris might have been the Giligames[6] and the site where they settled might have belonged to the Asbytes. The colonists did not bring with them a sufficient number of women and this is why, as Herodotus relates, some of the colonists married Libyan women who belonged to a neighbouring Libyan tribe.[7] This tribe might have been the Asbytes, who were *perioikoi.* Demonax incorporated the *perioikoi* together with the citizens of Thera, into the first tribe, which was one of the three tribes among which the citizens of Cyrene were distributed. According to the constitution, he planned the city of Cyrene in order to put an end to the internal strife that occurred in the reign of King Battus III, as a result of the struggle between the old settlers and the newcomers, who wanted to share with them their privileges.[8]

It is clear that some kind of amity and understanding existed between the native and the foreign elements in the population of Cyrene and its districts. But when King Battus II (—583/—570) confiscated the lands of the Libyans and gave them to the new settlers, whom he encouraged to come to strengthen the Greek element of Cyrene, the situation changed.[9] The Libyans waged war against the Greeks but, although they were supported by Egyptian soldiers sent by Apris, king of Egypt, they lost and were obliged to surrender.[10]

The next king, Arkesilaors II, quarrelled with his brothers, who sought the help of the tribe of the Auschises. The Libyan tribe did not hesitate to seize this opportunity to avenge its humiliation and previous defeat, and moreover it wished to regain control of the silphium trade from the kings of Cyrene.[11] The Libyans defeated the king but Herodotus does not say if they recovered their lands. These wars were just a beginning of the bitter hatred and hostility that did not cease until the Arab conquest of Cyrenaica in +642.

In —514, the Macae came to the help of Carthage and defeated the Spartan Prince Dorieus when he came to Wādī Kinyps in an attempt to found a Spartan colony there. We suggest that the Macae joined the battle against Dorieus in their own interests as this part of Libya was where they were settled.[12]

This co-operation between Carthage and the Macae reflects a friendly Carthaginian policy towards the Libyans which is different from that of the Cyrenaican Greeks. Carthage was jealous of her Syrtic possessions and at the same time pleased to receive the African trade that the Libyans Garamantes brought to the markets in Leptis Magna, Oea and Sabratha. Carthage did not try to penetrate their lands, as the Romans were to, or to dominate the Garamantian caravan route through the desert which led to the markets. For this reason Carthage was alarmed when the Spartan prince advanced to Wādī Kinyps. This episode calls to mind the well-known story of the altar (Arae

Philaenorum), which became the definitive boundary between Carthage and Cyrene towards the middle of the fourth century before our era.[13]

About —440 the rule of the Battus dynasty came to an end. The Libyans attacked a number of Greek cities in Cyrenaica. The Nasamonians besieged Eusperides in —413. Cyrene was in confusion. It became a theatre of the conflict among the various factions, some of whom were backed by Libyans.[14]

Cyrene and the other Greek cities in Cyrenaica were on the eve of serious changes, when Alexander the Great, after conquering Egypt, in —331 arrived in the city of Praetonium on the northern coast of Egypt, west of Alexandria, and drew near to Cyrenaica. Cyrene, thinking that he was planning to devastate the country, hurried to send him an embassy to announce its submission.[15] Shortly afterwards, in —322, Ptolemy I, who was then still a satrap of Egypt, acquired suzerainty of the city.[16]

The state of the Libyans under the Ptolemaic rule in Cyrenaica is revealed in some literary sources and inscriptions. According to Scylax (who probably wrote about —320), the Libyan tribes were: the Adyrmachidae, Marmarides, Nasamonians, Macae and Lotophagi.[17] It seems that Scylax mentioned only the names of the principal groups, as he omitted the names of Giligames, Asbytes, Auschises and Bakales which we know from Herodotus. It is evident that he gave these tribes one collective name, the Marmaridae, as they dwelt in the region of Marmarica which was called after them.[18]

In the first provision of the Ptolemaic constitution, granted to Cyrene by Ptolemy I,[19] it is stated that those who were born to Libyan women and Cyrenean fathers were citizens of Cyrene.

An inscription[20] from Cyrene dated from the third century before our era records that five of its military leaders offered Apollo one-tenth of the spoils they gained from the Macae and the Nasamonians whom they defeated. They constructed the *strategium* to celebrate their victory.

When Magas, king of Cyrene, was advancing to Alexandria, Arsinoe II, the wife of Ptolemy II Philadelphos, succeeded in stirring the Marmarides up against him and forcing him to retreat from Egypt.[21]

From the sources of Ptolemaic Egypt it is known that the Libyan horsemen in Ptolemy IV Philopators' army fought in the battle of Raphia in 217 B.C. and it is also known that in the army of the Ptolemys there were 3,000 armed Libyan fighters led by Amonios, a Greek from Cyrene.[22]

When Ptolemy the younger, king of Cyrene, went to Rome in —163 to lay a complaint before the Senate against his brother Ptolemy VII Evergetes II, he left a Libyan named Sympetesis in Cyrene as viceroy. The Libyans under the leadership of this viceroy and in alliance with the citizens of Cyrene and the other cities rebelled against Ptolemy the younger.[23]

On the whole during the Ptolemaic rule the Libyans led their own lives

with hardly any interference, although they probably could not escape the strict control of the Ptolemaic government in the sphere of economic activities.

In —96 Cyrenaica was bequeathed, by the will of Apion,[24] to the Roman people. Leptis Magna, the Phoenician city in Tripolitania, and the two other markets, Oea and Sabratha, were probably reduced to the status of stipendiary or subject cities about —47. In this way, Rome dominated Cyrenaica and Tripolitania.[25]

We depend on Strabo, Diodorus, Pliny the Elder and Ptolemy for information about the Libyan tribes up to the second century of our era.[26]

The main tribes identified by Herodotus and Scylax continued to exist and names of other tribes such as the Gaetuli and Phazani appear.

As for Cyrene and Cyrenaica as a whole, Rome did not consider it as a province until —75/74. From —96 to —75, Cyrene suffered a period of tyrannical rule by a Libyan tyrant called Anabo. He allowed his men to live in the city until evacuating it once he was sure that he could at any time occupy the city again.[27]

In —27 Augustus distributed the rule of the provinces between himself and the Senate. The latter was responsible for governing Cyrenaica which together with Crete made up one province and Tripolitania which was annexed to the province of Africa.[28]

From the very beginning of Roman rule, it was impossible to ignore the movement of tribes or indeed to limit it. The Libyans were accustomed to such movements by which they hoped to reach the coast. We may consider this as a natural result of the struggle between the peoples of the arid desert lands and those of the fertile coastal plains which the Greeks, then the Romans, tried to defend against the Libyans.[29] It was also difficult for the Romans to transform the nomadic life of some of the Libyan tribes into a settled one. Rome did indeed try to persuade the Libyans to settle and cultivate the farms near the coastal cities in order to facilitate the work of the Roman tax collectors.

In this way, we can understand the heavy burden laid on the Roman authorities in Libya, both in Cyrenaica and Tripolitania. The governors had to deal with the revolutionary tribes in Marmarica and the raids of the powerful Nasamonians coming from the Syrtis.

The only solution was for Roman forces to occupy the whole of Libya. If it was easy for Rome to occupy the coastal plains, it was not an easy task to penetrate far south in Fezzân to subdue the Garamantes who were a warlike tribe difficult to conquer.

The Romans were not content to wait, as the Phoenicians had, for the Garamantes to bring African goods to the markets nor were the Garamantes pleased to see the Romans dominating the lands which they used to cross freely on their way to the coast.

It was impossible for the Romans and the Garamantes to avoid war

which appeared to be the only way to settle the causes of conflict between the two parties.

In —20, the proconsul Lucius Cornelius Balbus marched against the Garamantes, invaded Fezzān and took some of the Garamantian cities by surprise. Among these was the capital Garama. This successful expedition of Balbus alarmed the Garamantes since it revealed the strength of Rome and made them more cautious in dealing with the Romans. The war against the Garamantes may be seen in connection with another war with another Libyan tribe, the *bellum Gaetulicum*, which is mentioned in an inscription of Leptis Magna. The Gaetulians lived in a region in the north-west of the zone of the Garamantes which extended to Numidia.[30]

An inscription of Cyrene[31] mentions the end of the war of Marmarika *(polemos Marmarikos)*. The date of this war is a matter of dispute. If we accept —20 for the war, it means that Cyrenaica was attacked by the Marmarides who were helped by the Garamantes. It is known that Quirinius, the propraetor of the province of Crete and Cyrene, defeated these tribes and this would seem to imply that the Roman authorities considered the defence of Libya its main responsibility. Indeed Balbus was sent to fight the Garamantes and Quirinius the Marmarides, and in the same year Leptis Magna in Tripolitania was saved from the Gaetulians.[32]

In the reign of Tiberius, the tribe of Musulami, a Gaetulian tribe, rebelled in Numidia under the leadership of Tacifarinas who was a Numidian deserter from the Roman auxiliary troops. In +20 Dolabella was sent with the Legio IX Hispania to support the Legio III Augusta. It seems that the military operations extended to the western parts of Libya. Roman troops camped near Leptis Magna in order to cut communications between the Musulami and the Garamantes. The Garamantes provided Tacifarinas with only a small body of fighters, fearing the anger of Rome. So when the Numidian rebel was killed in +24, an embassy of the Garamantes accompanied Dolabella to Rome to ask for peace. Rome accepted the request, preferring not to challenge the Garamantes who might have been ready for hostilities. The city of Leptis Magna in Tripolitania records with gratitude the termination of the *bellum Gaetilicum* which saved Leptis Magna from Tacifarinas.[33]

In +69 the Garamantes again faced the power of Rome when they interfered in a dispute between Oea and Leptis Magna. The latter city appealed to Valerius Festus the governor of Numidia who hurried to its help and forced the Garamantes to withdraw. He then conquered with surprising speed the Garamantes by penetrating into the heart of their homeland taking a short route across the desert known as Iter Praetor Caput Saxi.[34] After this triumph of Festus, the Garamantes thought it wise to make terms with the Romans and they manifested their goodwill by participating in two Roman expeditions that took place in the reign of Domitianus. One of these expeditions went to Sudan

and the other to Tebesti.[35] Neither after the victory of Balbus (—20) nor of Festus did the Romans construct any forts or keep Roman garrisons as a permanent force.[36] Undoubtedly, however, the Romans obtained what they wanted from the lands of the Garamantes, chiefly the carbuncle, that precious stone if we trust Pliny,[37] and which Strabo tells us came from Fezzān. The most important result of the wars against the Garamantes is that they the latter became a peaceful tribe and established peaceful relations with the Romans.[38]

Thus, the Garamantes were no longer a threat to the Romans. They were, however, replaced by another Libyan tribe, the Nasamonians, who became a source of trouble. In the reign of the Emperor Domitianus they also rebelled against Rome and expressed their discontent with the Roman tax collectors and the Roman policy which compelled them to remain on their own lands. They won a victory over the Roman forces sent against them, but committed the fatal error of getting drunk so that it was easy for the Romans to slay many of them and to disperse the others into the desert. Domitianus was proud of the Roman victory and announced in the Senate that the Nasamonians had vanished altogether. This is, however, not true as the Roman sources continued to mention the name of the Nasamonians.[39]

The second century of our era was for both the Roman Empire and for Libya a century of peace and prosperity. But towards its end, the coastal region in Tripolitania suffered again from the raids of the Garamantes and the Nasamonians. The Emperor Septimus Severus (+193–211), is said to have come to rescue Leptis Magna, his birthplace. This time the Roman defence policy changed. Instead of defeating the Libyans in battle and pushing them back to their lands in the desert, Septimus Severus and his successors built permanent forts and a series of defence lines. These were a new defence system designed to ensure safety and protecτion of the markets and other settlements on the coast and the olive-growing zone of Tripolitania. Forts were erected on the three main routes leading to the territory of the Garamantes. The forts were garrisoned by detachments of the Legio III Augusta. Behind these forts a zone of Limitanei settlements was created. The Limitanei were native Libyan soldiers, who were granted plots of lands after the end of their service in the Roman army.[40]

In +238, the Emperor Gordian III (+238–244) disbanded the Legio III Augusta. Locally raised troops were made responsible for the defence of the forts.

All these measures did not prevent the Libyan tribes from renewing their raids in Cyrenaica. The Marmarides attacked Cyrene in the reign of Claudius Goticus (+268–270). Tenagino Probus, the prefect of Egypt and an expert in desert war, succeeded in saving the city and renamed it Claudio-Polis.[41]

The emperor Diocletian (+284–305) found it necessary to reorganize the defence of the whole empire. He separated Cyrenaica from Crete. He

divided Libya into Upper Libya or Pentapolis and Lower Libya. Tripolitania was made a province.

In 298 the Emperor Maximian conducted a campaign against the Hilaguas or Ilaguas, a Libyan tribe in the Syrtis.[42]

Under Constantine some Libyans were converted to Christianity but they became Donatists. This was a way of expressing their national feelings since Donatism was a rival faith to orthodox Catholicism. What was worse for the Roman authorities in Tripolitania, Donatist extremists, known as Circumulliones, a mainly poor and miserable colony, plundered both Catholic and pagan farms.[43]

Some peaceful years passed and then in 363 the territory of Leptis Magna was severely ravaged by a new Libyan tribe, the 'Austuriani'. Leptis Magna did not fall because of its strong walls. The Austuriani claimed that they attacked the city in revenge for the murder of one of their tribesmen at the hands of the Tripolitanian authorities. But it was a cruel revenge, as stated by Ammianus Marcellus (xxviii.vi), for they massacred the peasants and burnt any property they could not remove. The people of Leptis Magna asked Romanus, the Comes Africae (between +363 and +373 under the Emperor Valentian I (+364–75)) for help. Romanus promised to help on the condition that the city provided him with 400 camels and a vast quantity of supplies. The city complained to the emperor, but Romanus was right as he could not fight the Libyans unless he had camels as they had, for they enabled them to attack and withdraw quickly. The Austuriani came back and devastated the territory of Leptis Magna and besieged the city for eight days, after which they left. Once more the strong fortifications of the city saved it. Some argue that the Limitanei sided with the Austuriani. At any rate, these repeated raids caused the decline of the economy of the coastal cities of Tripolitania. Oea was also attacked by these strong warlike tribes which may also have attacked Sabratha, even though Ammianus does not mention such raids against this city.[44]

The Pentapolis zone in Cyrenaica had in its turn to face the Austuriani. Our best reference is Synesius, the bishop of Ptolemais.[45] In the beginning of the year +404, the Austurians attacked on every side. It seems that their favourite method of war, as it had been in Tripolitania, was to overrun the countryside and keep the cities in a chronic state of siege. Synesius was at the centre of the crisis, trying to save his country, 'wishing to see for himself what sort of men dared to attack Roman citizens', as he said in one of his letters. In another of his letters, he describes himself at the head of the defenders guarding the ramparts. He invented and constructed a catapult for hurling stones upon the enemy. In Letter 73 to his friend Troilus, Synesius lamented the misfortunes of his country which was faced with a sad future because of war and famine. He tried with the assistance of rich landlords in the country-

side to levy troops of native volunteers and transformed rural houses into small forts from the roofs of which the guards could raise the alarm. Synesius praised Anysius, who was newly appointed as a commander of the Roman forces, for with only forty Unigardae he defeated a large number of the Austurians.

But Synesius' joy soon vanished. In +412, Anysius was replaced by Innocentius, an unsuccessful leader. The situation became worse as is shown by his second *Catastasis*, a speech he delivered to raise the spirits of his fellow men. What made the raids of the Austurians so disastrous was that they were accompanied by the Mazikes, another Libyan tribe, which also participated in the destruction of life in the coastal plain.[46]

On the other hand, friendly relations developed between the Cyrenaicans and some Libyan tribes, especially the Macae. They were allowed to enter the Pentapolis provided that they obtained the written permission of their prefect who seems to have been a Roman officer. This implies that the Macae were under Roman military government.[47]

Codex Theodosiamus, VII.XV.1, shows that some areas of land in Tripolitania were conceded to the gentiles who were to become guards of the *limes* and trenches. The gentiles were Libyan tribesmen. Augustine states that some of the pacified tribes near the frontier ceased to have kings of their own, but received prefects from the Roman government and as a result converted to Christianity. This may be the case of the Arzuges who lived in Tripolitania. The safety of travellers and landowners depended upon their oath to the Roman authorities. The Arzuges were very probably Libyco-Phoenicians, as a strong influence of Punic is shown in their language. They were pagan, but many of them converted to Christianity by the end of the fourth century. They served as *Limitanei* in the frontier zone.[48]

It is very interesting to know from the Decree of Anastasius that the movement of the Romans in the territory of the barbarians (i.e. Libyans) was rigorously controlled in Cyrenaica.[49]

As a military precaution, the upper plateau surrounding Cyrene and some cities below it such as Darnis and Apollonia-Souza were protected against the Libyan raids of the Austurians and Mazices both by nature and by a highly complex system of forts, fortified churches and watchtowers, some of them known as *Gsurs*. This system spread widely in Byzantine times.[50]

The vigorous tribe of Luwatah succeeded the other Libyan tribes in threatening both Tripolitania and Cyrenaica. They established friendly relations with the Vandals who had occupied Tripolitania in A.D. 439. But in 477, after the death of their king, Genseric, there was a conflict between the two parties. Cabaon, the Luwatah leader, led a revolt in Tripolitania. Procopius gives a vivid account of the battle that took place. The Vandals fought on horseback while the Libyans used camels. The Vandals were defeated. The Luwatah tribe defeated the Vandals once more and were responsible for sacking Leptis

Magna, but the fall of the city may have taken place in +643, before Amr ibn Asi left for Tripolitania after conquering Cyrenaica.

The Luwatah tribe indeed stormed Leptis Magna after the Byzantines had reoccupied Tripolitania to revenge the slaughtering of eight Luwatah notables in the palace of Duke Sergius in +543.[51] The Luwatah tribe found its way into Cyrenaica where they too settled on its fertile plains. They made Barca their capital.[52]

Indeed, Luwatah tribes became the dominating power in the interior of Libya and remained so until the Arabs came in +642. Amr ibn Asi wisely recognized this fact and his success in invading Cyrenaica in such a short time was due to his co-operation with them.

This is, in brief, the story of the Libyan resistance to the foreign powers that occupied their lands, put restrictions on their liberty of movement and tried to keep them away from the coastal plains.

Notes

1. C. B. McBurney and R. W. Hey, *Prehistory and Pleistocene Geology in Cyrenaican Libya*, Cambridge University Press, 1955; C. B. McBurney, *The Stone Age of Africa*, Harmondsworth, Pelican Books, 1960; U. Paradisi, 'Prehistoric Art in Gebel el-Akhdar (Cyrenaica)', *Antiquity*, Vol. XXXIX, No. 154, June 1965, pp. 95–101.
2. A good survey of Libyans in Egyptian reliefs and inscriptions is found in O. Bates, *The Eastern Libyans*, London, Macmillan, 1914; J. H. Breasted, *Ancient Records of Egypt*, Chicago, University of Chicago Press, 1906; N. K. Sandars, *The Sea Peoples*, London, Thames & Hudson, 1978; K. A. Kitchen, *The Third Intermediate Period in Egypt c. 1100–650 B.C.*, Warminster, Aris & Phillips, 1973.
3. 'Expedition of the University of Pennsylvania, Spring 1963', *Bulletin of the University Museum of the University of Pennsylvania*, Vol. 5, No. 5.
4. Herodotus, IV.168–86; S. Gsell, *Herodotus, Textes relatifs à l'Histoire de l'Afrique du Nord*, pp. 66ff., Algiers, Typographie A. Jourdan, 1915; W. W. How and J. Wells, *A Commentary on Herodotus*, pp. 356–62, Oxford University Press, 1967. To Herodotus all the population of North Africa were Libyans. J. Desanges, *Catalogue des tribus africaines de l'Antiquité classique à l'ouest du Nil*, Dakar, Université de Dakar: Section d'Histoire, 1962.
5. The story of the foundation of Cyrene is told in detail in Herodotus, IV.148ff.
6. Herodotus, IV.169.
7. Ibid., IV.170; How and Wells, op. cit., pp. 355, 357.
8. A. H. M. Jones, *The Cities of the Eastern Roman Provinces*, p. 353, Oxford, Clarendon Press, 1937; cf. F. Chamoux, *Cyrène sous la Monarchie des Battiades*, p. 221, Paris, 1953, who considered the *perioikoi*, the newly arrived Greeks. E. Rosenbaum noted the Libyan features in some of the Cyrenaican statues, in E. Rosenbaum, *A Catalogue of Cyrenaican Portrait Sculpture*, pp. 8, 22, London, Oxford University Press, 1960. Some Libyan names also appear among the names of Greek citizens, but Chamoux, op. cit., says that this is an exception.
9. Herodotus, IV.159.
10. Ibid.

11. Ibid., IV.160. This tribe assisted the king's brothers in founding Barca (modern El Marj).
12. *CAH*, Vol. III, pp. 684; cf. Chamoux, op. cit., pp. 162ff.
13. *Sallust. Jug.*, Vol. LXXIX; C. Dulière, 'Les Autels des Philènes dans le fond de la Grande Syrte', *Correspondance d'Orient*, 8–9, 1965–66, pp. 17–26; R. Goodchild, 'Arae Philaenorum and Automalax', in J. Reynolds (ed.), *Libyan Studies*, pp. 155–72, London, 1976.
14. Diodorus Siculus, XIV.34.
15. Ibid., XVII.49. M. Cary, *A History of the Greek World, 323–146 B.C.*, p. 12, London, Methuen, 1972.
16. Diodorus Siculus, XVII.21. On Ptolemaic rule, see J. Machau, 'Cyrène à l'Époque Hellénistique', *Rev. Hist.*, 1951, pp. 41–55.
17. Bates, op. cit., p. 55. Marmarides are first mentioned by Scylax who did not mention Giligames. Only Herodotus gives this name.
18. See Ibid.; Desanges, op. cit., p. 163; How and Wells, op. cit., p. 356.
19. *SEG*, IX.1. This constitution is discussed by many scholars among whom are S. Reinach, 'La Charte Ptolémaïque de Cyrène', *Rev. Arch.*, Vol. XXVI, 1927, pp. 1–30; M. Cary, 'A Constitutional Inscription from Cyrene', *JHS*, Vol. XLVIII, pp. 222–38 (it is a good article but his translation of some of the provisions of the constitution might be revised); G. Oliverio, 'Documenti di Cirene Antica', *Rivista di filologia classica*, Vol. VI, No. 2–3, 1928, pp. 183–222; Jones, op. cit., No. 9, p. 485.
20. *SEG*, IX.77.
21. Cary, op. cit., p. 85.
22. Polybius, V.65, 5; cf. G. T. Griffith, *The Mercenaries of the Hellenistic World*, pp. 118f., Cambridge University Press, 1935.
23. A. Rowe, *A History of Ancient Cyrenaica*, supplement to *Annales du Service des Antiquités de l'Égypte*, No. 12, pp. 41ff., Cairo, 1948.
24. *SEG*, IX.7; M. N. Tod, 'Greek Inscription III', *Greece and Rome*, Vol. II, No. 4, October 1952, pp. 47–51.
25. D. E. L. Haynes, *An Archaeological and Historical Guide to the Pre-Islamic Antiquities of Tripolitania*, pp. 33ff., Tripoli, 1959.
26. See Bates, op. cit., pp. 55–65, where these authors are quoted.
27. S. I. Oost, 'Cyrene 96–74 B.C.', *Classical Philology*, Vol. LVIII, No. 1, pp. 11–25. Cf. Plutarch.
28. P. Romanelli, *La Cirenaica Romana (96 a.c.–642 d.c.)*, p. 50, Verbania, 1935.
29. Pliny the Elder (*Natural History*, 19–40) states that in 93 B.C. 'thirty pounds of silphium were sent from Cyrene to Rome on behalf of the state. Caesar found 500 pounds of the drug in the aerarium'. This amount might be a tribute or it could be a gift of the government of Cyrene. If it is a tribute, it could be levied on the natives. See Oost, op. cit., p. 13.
30. C. M. Daniels, 'The Garamantes of Fezzan', *Libya in History*, Historical Conference, Benghazi, 1968, pp. 261–71; M. I. Rostovtzeff, *The Social and Economic History of the Roman Empire*, 2nd ed., p. 338, Oxford University Press, 1963; J. M. Reynolds, *The Inscriptions of Roman Tripolitania*, No. 301, Rome, 1952.
31. *SEG*, IX.63.
32. Rostovtzeff, op. cit.; R. Syme, 'Tacifarinas, the Musulamii and the Thubursicu', in *Studies in Roman Economic and Social History*, pp. 113–30, Princeton University Press, 1951.
33. One of the mosaics of Zilten shows Gaetulian prisoners of war cruelly killed in the amphitheatre. See Rostovtzeff, op. cit.; Syme, op. cit.
34. Tacitus, *Historiae*, IV.49–50, Pliny, *Natural History*, V.38. Valerius Festus probably gained his victory over the Garamantes in such a swift expedition, by using camels; see

O. Brogan, 'The Camel in Roman Tripolitania', *PBSR*, Vol. XXII, 1954, pp. 126–31 (p. 128); R. Goodchild, 'Oasis of Legio III on the Routes to Fezzan', *PBSR*, Vol. XXII, 1954, p. 56.
35. See note 34.
36. Daniels, op. cit.
37. Pliny, *Natural History*, v.
38. Cf. E. W. Bovill, *The Golden Trade of the Moors*, p. 45, London, Oxford University Press, 1970.
39. Haynes, op. cit., p. 39.
40. See Reynolds (ed.), op. cit., Nos. 2, 3, 4, 5, 13, 15. It is very interesting to note that the Limitanei used Roman letters to write their Punic inscriptions. R. Goodchild, 'Roman Sites on the Tarhuna Plateau of Tripolitania', in Reynolds (ed.), op. cit., pp. 72–93, cf. S. Leir Della Vida, Appendix I, in ibid.
41. *SEG*, IX.9; cf. R. Goodchild, 'Decline of Cyrene and Rise of Ptolemais', in Reynolds (ed.), op. cit., p. 225.
42. Haynes, op. cit., p. 57. The name of this tribe is connected with the name of Luwatah tribes in Byzantine sources.
43. Ibid., pp. 55f.; R. H. Warmington, *The North African Provinces from Diocletian to the Vandal Conquest*, pp. 66ff., Cambridge University Press, 1954.
44. Warmington, op. cit., pp. 9f., 19; Bates, op. cit., p. 237; A. H. M. Jones, 'Frontier Defence in Byzantine Libya', *Libya in History*, op. cit., pp. 289–97 (p. 290); J. M. Reynolds, 'The Austuriani and Tripolitania in the Early Fifth Century', *The Society of Libyan Studies, 8th Annual Report, 1976–1977*, p. 13.
45. It is essential to study Cyrenaica and Synesius together in this period and to read his letters thoroughly, so as to get a good knowledge of the difficult times which Cyrenaica and Synesius suffered under the pressure of the Austuriani. I may refer to his letters translated by A. Fitzgerald and also his essays and hymns. See A. Fitzgerald, *The Letters of Synesius of Cyrene*, Oxford University Press, 1926; *The Essays and Hymns of Synesius of Cyrene*, Oxford University Press, 1930; R. Goodchild, 'Synesius of Cyrene: Bishop of Ptolemais', in Reynolds (ed.), op. cit., pp. 239–54.
46. Jones, 'Frontier Defence . . .,' op. cit., p. 293.
47. R. Goodchild, 'The Limes Tripolitanus II', in Reynolds (ed.), op. cit., pp. 36f.
48. Jones, 'Frontier Defence . . ., op. cit.
49. D. J. Smith, 'The Centenaria of Tripolitania and their Antecedents', *Libya in History*, op. cit., pp. 299ff.
50. Bates, op. cit., pp. 67ff.; Haynes, op. cit., pp. 62f.; Procopius, *Wars*, IV.21, pp. 1–22, 13–20; 28, pp. 48–57: *Buildings*, VI.4, pp. 6–9; D. I. Mattingley, 'The Laguatan: A Libyan Tribal Confederation in the Late Roman Empire', *Libyan Studies*, Vol. 14, 1983, pp. 96–186. In this article, Mattingley expressed clearly his idea that in later Roman times there appeared a powerful confederation of Libyan tribes under the name of Laguatan, Leuathae or Lawata and that this confederation was really an alliance between two main types of tribes: the neo-Berbers who migrated from the east and the original inhabitants of desert oases of Cyrenaica and Tripolitania. Mattingley prefers using Laguatan and a Libyan plural form to denote the name of this confederation of the Libyan tribes, even though Procopius and the Arab authors used the name Louata or Lawata. It is noteworthy, as Mattingley showed, that the main instrument of war used by these tribes was the horse and not the camel.
51. R. Goodchild, *Cyrene and Apollonia*, p. 28.
52. R. Goodchild, 'Byzantines, Berbers and Arabs in Seventh Century Libya', in Reynolds (ed.), op. cit., pp. 255–67.

The Semitic migrations to Libya and North Africa

B. H. Warmington

The settlement by Phoenicians along much of the coast of the area occupied by the contemporary states of the Libyan Arab Jamahiriya, Tunisia, Algeria and Morocco constitutes the major movement of population of Semitic origin into the western Mediterranean before the Arab conquest. Although much is known of the history and culture of Phoenicia during the Bronze Age down to —1200, the situation in the early Iron Age is less clear, and one can only hypothesize about the reasons leading to the movement of colonization in which the cities of Tyre and Sidon were particularly prominent. Nothing of historical value can be gained from the legendary accounts provided by Greek and Roman sources chiefly centred on the figure of Dido, and which betray the aetiological or poetical purposes common to much Hellenistic speculation about the origins of non-Greek communities. It is probable that pressure of population on limited resources, together with the resultant social tensions, played some part, but it is significant that the Phoenician colonizing movement was contemporary with, or more probably slightly earlier than, the better known movement of Greeks to other coasts of the Mediterranean and Black Sea. The origins of both must lie in the search for sources of raw materials, especially metals, required by the growing communities of the early Iron Age, who were exhausting those in their immediate vicinity. Important sources of silver, tin and iron lay in the Iberian peninsula, and there can be little doubt that the earliest Phoenician voyages to southern Spain preceded settlement in North Africa.

In the ancient tradition, foundation dates for Gades (—1110) and Utica, near Carthage (—1101), were given; Lixus in Morocco was even said to be earlier than Gades. No uncontested archaeological evidence for such early foundations exists. On the other hand, the foundation date given for Carthage (—814) is attested reasonably closely by excavated material from the cemeteries, even though the nature and status of the so-called 'foundation deposit' are not clear. Material from Utica is perhaps as early but elsewhere there are so far few finds of earlier than the seventh century before our era.

The Phoenician movement to the western Mediterranean also involved settlements on the alternative route to Spain by way of Sicily, Sardinia and

the Balearic Islands, but the key position of Carthage, close to the narrowest point in the Mediterranean, was perhaps determined from the beginning. Its name in Phoenician, Kart-Hadasht, meant 'New City'. Up to the sixth century before our era, it is likely that the Phoenician communities in the west remained politically as well as economically tied to their homeland, unlike Greek colonies which became autonomous at an early date. The emergence of Carthage as their leader and then as an independent power with an empire based on maritime supremacy in the western Mediterranean, was due partly to the subjection of Phoenicia to Babylon and then to Persia, and partly to the need to resist competition from Greek colonies, especially those of Sicily. The history of the external relations of the Carthaginians is primarily that of attempts to maintain a close or strictly controlled mercantile system in the area west of a line between Cap Bon and Sicily and south of a line Panorumus–Calaris–the Balearic Islands, first against the Greeks of Sicily and then against Rome. The policy was almost exclusively defensive and largely successful from the sixth to the third century before our era. A peculiarity was that unlike contemporary Greek and Italian city-states Carthage relied for her army (but not her navy) on mercenary soldiers. This was in part a function of her wealth and in part of the lack of a permanent threat from her neighbours in the Maghrib.

Carthage and its empire was the most important example of an ancient society which derived most of its wealth from trade. Owing to its perishable nature, textiles, unworked metals, slaves and later foodstuffs, its volume cannot be calculated. The production of small manufactured objects was, however, considerable and important because the most profitable trade was in the acquisition of valuable raw materials from less advanced peoples in exchange for goods of small value. On the other hand, in spite of conflicts, Carthaginian trade with the Greek and Italian world was also extensive. The lack of proven early material is probably merely a function of the state of excavation and the difficulty of identifying early Phoenician material. In view of the practice of ancient shipping of anchoring overnight, and the slow rate of sailing, it is probable that anchorages existed from the earliest period of the movement approximately 50 km apart along the entire coast of the Maghrib, many of which grew to be permanent colonies. Preferred sites were small islands, or sandy beaches with protecting headlands.

It is well known that the majority of Phoenician settlements were of modest size compared with Greek foundations, though this disparity should not be exaggerated; at least in the Black Sea, many Greek foundations were very small places in their early years and remained so. There are two major implications of the small size of the settlements in the Maghrib. One is that the indigenous population (generally referred to as Libyans in this communication) at the time was not militarily formidable enough to make it necessary that colonies should be of substantial size for self-defence. The other is that

the colonists must have lived in a relative state of symbiosis with them, because, apart from Carthage, to be discussed below, it does not appear that in the early period the colonists had to devote a substantial portion of their resources in manpower to agriculture. This close relationship of indigene and colonist was a major basis of the profound cultural influence which the Phoenicians were to have on the inhabitants of the Maghrib.

Settlements in the modern Libya, though few in total number, were of particular significance in the general history of the region. The cultural penetration was so pronounced that the site later known as Arae Philaenorum, which marked the boundary between the area of Phoenician control and the Greeks of Cyrenaica, persisted as the boundary between the Roman province of Africa and Cyrenaica for many centuries. The principal settlement was Leptis, in Roman times Leptis Magna, which together with two other foundations, Sabratha and Oea, formed the African Tripolis. The earliest identifiable materials date from the sixth century before our era. Leptis became the administrative centre for a substantial coastal area in the Gulf of Syrtes. In view of the relatively narrow stretch of land between the sea and the desert, and the apparently small size of the indigenous population, it is normal to associate the importance of Leptis and also of Sabratha and Oea to their position at the end of the shortest route from the Mediterranean across the Sahara to the Fezzān and the middle and upper reaches of the Niger. It was subsequently the starting-point for Roman expeditions to Ghadâmes and beyond, and presumably of a Carthaginian named Mago who made the journey three times. Unfortunately our evidence, both literary and archaeological, does not indicate the nature of the trade, which was presumably in the hands of the Garamantes. Precious stones—chalcedony, emerald and carbuncle—are indicated, but gold is also a possibility. It is well known that in early trade the profitability of exotic goods of little bulk is considerable, and this is attested for Tripolitania by the massive rebuilding of Leptis in the Roman manner in the time of Augustus by its Phoenician inhabitants. There is an analogy with Palmyra, whose wealth was largely due to the import into the Mediterranean world of exotic goods from the distant east. The extent of this trade was considerable in spite of political obstacles; in the case of Leptis and its associated cities, these did not exist, but no doubt the natural obstacles were formidable. It is significant that in —514 an attempt by Greeks to settle in the area was defeated by Carthaginians and Libyans jointly.

Herodotus reports two attempts to circumnavigate Africa. In the first of these, the Egyptian King, Necho (*c.* —610/—594), sent Phoenician sailors down the Red Sea to make the voyage from east to west. According to Herodotus, who believed the story, they took over two years to do so. If successful, this must have been known at Carthage, as was an unsuccessful attempt in the opposite direction in the fifth century before our era when, again according

to Herodotus, a Persian prince with a ship and crew acquired in Egypt sailed through the Straits of Gibraltar and south along the Moroccan coast, certainly passing well beyond the southern limit of the Sahara before being forced to return. It is in this context that must be placed the well-known voyage of a certain Hanno, perhaps a member of a leading family in Carthage, down the west coast of Africa. When all the criticism of modern scholarship has been taken into account (and indeed the report of his voyage was doubted in Roman times) there is nothing improbable in its general outlines, though much in the details. The object is generally supposed to have been to tap West African sources of gold, since Herodotus described the method of barter used in this trade which was also used in the Arab and early modern periods. It does, however, remain difficult to explain how such trade could have been unknown in the Roman period. Archaeologically, the most significant addition to knowledge has been the discovery of Phoenician material on the island of Mogador, an essential point on any sea route further south. On the other hand, it is certain that Tingi and Lixus were settled at an early date and Phoenician cultural penetration of the interior of Morocco as far as Fez was extensive.

In the present state of knowledge it is often difficult to be sure whether specific sites known to be Phoenician in character, either because of isolated finds or the persistence of Phoenician culture into Roman times, were established in the period of the original movement from Phoenicia or after Carthage had assumed the leadership and itself planted further settlements during the sixth and fifth centuries before our era. For example, Hadrumetum was said to be a Phoenician foundation in origin but we know nothing of the earliest period of places like Gigthis, Tacapae, Thaenae or Thapsus in the same area. On the analogy of the Roman period, it is likely that the wealth of some of these was derived in some part from fishing.

The preponderance of the city of Carthage was not merely political and economic but demographic. According to Strabo, the population of the city (excluding the area known as Megara) was 700,000, which, however, is perhaps not acceptable. From estimates of the size of the fleet which Carthage could put into battle in the sixth and fifth centuries before our era, her population would seem to be similar to that of Athens at the same period, between 400,000 and 500,000. Only Syracuse in Sicily approached this size, which exceeds by many times the population of any other Phoenician town whether old or new. It is interesting to consider that the same exaggerated ratio of the population of the 'metropolis' to other towns is observable in the Carthage of the Roman period. The growth of population, by stages no longer detectable, inevitably led to the direct exploitation of a substantial territory, no doubt at first Cap Bon. Subsequently, certainly during the fifth century, direct control was extended west and south towards a line extending roughly from Thabraca to

Thaenae. The prosperity achieved astonished the Syracusan Agathocles in the fourth century, and subsequently a treatise on agriculture by a Carthaginian named Mago was translated into Latin after the destruction of the city. Though this work is lost, later Byzantine excerpts were translated into Arabic in Spain in the Middle Ages. The chief agricultural activity was fruit and cereal growing, olive cultivation and stock-rearing. While some of the farms created by the Carthaginians were worked by slave labour, it seems probable that much of the land was in the hands of indigenous peoples and of the Phoenicians themselves. The techniques of exploitation were based on those which were well established in the fertile areas of Syria and Lebanon.

The influence of the Phoenicians on the culture of the indigenous peoples of the Maghrib was profound and long lasting. Over the centuries, countless thousands of the inhabitants served in the mercenary armies, officered by Carthaginians, either as conscripts from subject areas, or as mercenaries. Intermarriage between Carthaginian leaders and the families of Libyan chieftains occurred for political reasons in the third century and had probably been frequent among the rest of the population. Substantial monuments of the fourth or third centuries before our era such as the tumulus at Mzora and the Medracen show not only Phoenician influence in the actual buildings, but imply social and economic changes among the indigenous peoples which led to the formation of structures able to mobilize the resources sufficient for major undertakings. Organized states finally emerged as Carthage declined after the Second Punic War (—218/—202). Massinissa, who ruled much of the area later to be the Roman province of Numidia from *c.* —204 to —148, encouraged the existing tendency towards settled agricultural life among his subjects, and especially the cultivation of cereal crops. At this time, the late form of the Phoenician language known as neo-Punic became the lingua franca throughout the Maghrib, being used on indigenous coinage and on sepulchral monuments, and there was deep penetration by Phoenician religion and art. Massinissa's capital Cirta took on the aspect of a proper city, and there was the prospect of incipient urbanization elsewhere. Immediately before and after the destruction of Carthage (—146) many of the inhabitants fled to Numidian territory and to Mauretania further to the west, thus increasing the impact of the immigrant culture. It must also be recalled that though Carthage was destroyed, a number of Phoenician communities, including Utica, survived. Since direct Roman interest in the Maghrib after the destruction of Carthage was limited to the northern parts of Tunisia; the indigenous kingdoms of Numidia and Mauretania enjoyed another century of at least semi-independence as client states of Rome. The strength of the mixed Phoenician-Libyan culture is shown by the way in which many centres of population progressed towards urbanization independently of the addition of Italian immigrants in substantial numbers under Caesar and Augustus. Over thirty communities from as far

apart as Volubilis and Leptis Magna were still using the old Phoenician term '*sufet*' as the title of their chief magistrates till towards the end of the first century of our era, and Phoenician nomenclature lasted as long. While in most respects Latin culture then became dominant, it is doubtful if the total number of immigrants from Italy exceeded that of the Phoenicians of the earlier period, at least in the territory of modern Tunisia.

The intensity of Carthaginian religion was viewed with hostility by Greek and Roman sources owing to the long persistence of human sacrifice, which is attested in the so-called *tophets* found at Carthage, Hadrumetum and Cirta, in which the ashes were interred in urns under inscribed stelae. In the polytheistic system, the chief deity was Baal Hammon, but the goddess Tanit, probably of Libyan origin, also received widespread worship. These cults, and the use of *tophets*, spread throughout the Maghrib. In the Roman period, Baal Hammon became identified with Saturn, not Jupiter, as the chief deity in both romanized and unromanized locations, and Tanit continued to flourish under the name Caelestis. The theophoric nomenclature prevalent in the Phoenician settlements continued, with many names being reproduced in Latin form till the end of the Roman period. It is often suggested that the intensity of religious belief in the Maghrib of both the early Christian and early Islamic periods had its origin, or at any rate its counterpart, in the Phoenician era.

During the period of Roman rule in the Maghrib, elements of Semitic origin in the population received a slight increase from two sources. The larger group were those from the Syrian regions—that is primarily from the Roman province of Syria but including some from Trajan's province of Arabia. Syrians are attested exclusively by the epigraphic material, and they are in fact the largest attested group of incomers to the Maghrib in Roman times apart from Italians. Their preponderance seems real even though it is in part explicable because they are identifiable through a distinctive nomenclature. They are found in all areas of the Roman Maghrib, including Volubilis and other sites in Mauretania Tingitana. It is normal to relate a substantial portion of the immigrants from the Syrian region to the commercial opportunities available in the Maghrib, especially from the second century of our era onwards. There is no evidence to show that they constituted a substantial element among the landowning classes. But there must be added to these traders and merchants, the soldiers of Syrian origin in a number of specialized units of cavalry and archers known in the province in the third century. It was natural that these units, admirably chosen for patrol duties in parts of the African lines, are found primarily in southern Numidia, at Lambaesis, Calceus Herculis and at Castellum Dimmidi, the point of maximum extension of Roman control.

Known more from literature (and speculation) than from epigraphic

sources are Jewish elements. Tacitus recorded a legend, from unknown sources, that Jews driven from Crete had settled in Libya, but this story is included in a series of similar tales of the speculative sort current among educated amateurs in Antiquity about the early history of the Jews, and has no historical basis. The Greek and Latin authors not only did not read the Septuagint but even ignored the work of Flavius Josephus. Nothing is known of any Jewish elements in the population of Phoenician Carthage, though they could obviously have existed. In the Roman period, the Talmud records rabbis at Carthage who can certainly be dated to the second and third centuries of our era, and several works by Tetullian (third century) imply that in his lifetime there was a substantial Jewish population at Carthage; later writers (Augustine and Jerome) indicate Jews at Oea, Simitthus, Uzalis and Hippo Regius. There was a Jewish cemetery at Gammarth outside the city of Carthage and possibly small synagogues at Hammam Lif and Leptis Magna. Epigraphic material, primarily from Gammarth, shows a heavy preponderance in the use of the Latin language and Latin nomenclature, though there are some well-known names such as Aaron, Joseph and Iehouda. The evidence indicates that the Jewish element in the Maghrib of the Roman period came from the Jews of the Diaspora, specifically from Italy (including Rome itself), not from Judaea. They were concentrated in northern Tunisia and it is reasonable to conclude that many, like the Syrians, were in commercial activities.

Nearly forty years ago, M. Simon, in *Le Judaïsme berbère dans l'Afrique ancienne*, made use of a well-known passage in Ibn Khaldūn, which referred to some Berbers, especially in the Aures and in modern Morocco, who followed Judaism which they had received from the Israelites of Syria. This assertion was associated with a genealogy which traced the descent of the Berbers from Canaan, Ham and Noah. Simon proposed that this story had grown up among Jewish rebels who had escaped from the great Jewish revolt in Cyrenaica in the time of Hadrian and fled to the interior regions of the Maghrib; their proselytization of the indigenous peoples had been successful because of the 'punicization' of the population. Such Judaizing Berbers would have been a link between the Phoenician era and the Islamic. This hypothesis is, however, not supported by any other evidence of Jewish settlement outside the coastal areas, and in general it may be said that not enough is known of Berber religion to determine the accuracy of Ibn Khaldūn's comment. In fact, any link between the Phoenician and Islamic eras should be sought in the mixed populations of the urbanized centres, especially in Tunisia, in so far as these continued to exist until the eleventh century.

New lights on the distinction between Ammon of Libya and Zeus of Cyrene

Ahmed H. Ghazal

The Greek literary sources on the cultes of Ammon and Zeus in Libya are interpreted by modern scholars in different ways. Pindar's statement at the beginning of the fourth Pythian Ode links the origins of Cyrene to Thera as is clear from Medea's words. She says:

Φαμὶ γὰρ τᾶσδ' ἐξ ἁλιπλάκτου
ποτὲ γᾶς Ἐπάφοιο κόραν
ἀστέων ῥίζαν φυτεύσεσθαι μελησίμβροτον
Διὸς ἐν Ἄμμωνος θεμέθλοις.[1]

The translation of Sandys runs: 'For I aver that, from this wave-washed land of Thera, the daughter of Epaphos—Libya—will, in days to come, find planted in her a root of cities that shall be fostered of men near the foundations or Zeus Ammon.'[2]

In the light of this translation, Parke states that, by the 'Zeus Ammon', the poet means the Zeus of the great Doric temple at Cyrene.[3] But in his explanation of this phrase Fennel states that Pindar means by 'Zeus Ammon' the Ammon to whom the temple at Siwa was dedicated.[4] The same view is also held by Conway, who thinks that the god is 'Zeus Ammon' of the temple in the east of Libya.[5]

It is clear that these different interpretations are a result of the translation of the last phrase of the poet's statement: 'Διὸς ἐν Ἄμμωνος θεμέθλοις', which is translated 'near the foundations of Zeus Ammon'. There is here an indefinite range of possibilities. For taken in isolation, the phrase would ordinarily mean: 'of Zeus, near the foundations of Ammon'. According to this, the suggested literal translation of the passage is: 'For I aver that, from this wave-washed land of Thera, the daughter of Epaphos—Libya—will in days to come, find planted in her a root of cities that shall be an object of Zeus' love to men near the foundations of Ammon.'[6] In this case, it is clear that the poet here means Zeus whose temple is built at Cyrene near or on the lands of Ammon. The word 'θεμέθλοις' is a general term which means the sacred lands of Ammon in North Africa,[7] where he was already worshipped by the Libyan tribes. So it is clear that Pindar makes a distinction between the two gods.[8]

The distinction between Ammon of Libya (at Siwa) and Zeus of Cyrene is clear to the classical writers and the Greek term 'Ζεύς Ἄμμων' is not used by them, but is sometimes wrongly attributed to Pindar and Herodotus by some modern scholars as a result of the traditional translation.[9]

Pindar also composed a hymn in honour of Ammon of Libya and sent it to the Ammonians.[10] The verse starts with Ἄμμων Ὀλύμπου δέσποτα' which means 'O Ammon, lord of Olympus'.[11] The hymn was carved on a triangular slab, which was beside the altar dedicated by Ptolemy[12] to the god in his temple of Siwa.[13] It should be noted here that the poet sent the hymn to the Ammonians of the temple of Siwa and not to the temple of Zeus in Cyrene.[14] It is clear that Pindar honoured Ammon and placed him on the same level as Zeus of Olympus. Moreover, he established a temple for Ammon in his native Thebes with a statue carved by the sculptor Calamis.[15]

Ammon of Siwa achieved great prestige because of his importance in the Greek colonies in Libya during the fifth century before our era. The phrase of Theodoros of Cyrene in Plato's dialogue: 'νὴ τὸν ἡμέτερον θεὸν τὸν Ἄμμωνα' which means 'By our god Ammon',[16] asserts that the god became the principal deity in the area.[17]

When the Cyrenaeans wished to put up a monument at Delphi, they chose a statue of Ammon in a chariot.[18] It was dedicated by Arkesilaos IV, when the Cyrenaean team won the chariot-race in the Pythian games at Delphi in —462,[19] which was followed by another victory at Olympia in —460.[20]

The oracle of Ammon at Siwa was officially consulted by the Cyrenaeans and consulted also on private matters.[21] Eubotas of Cyrene was told by the oracle of his coming Olympic victory. He therefore had a statue of himself made beforehand, and so was proclaimed victor and dedicated the statue on the same day in Olympia in —408.[22]

It was one of the first fruits of the new policy of the Greek colonists under the reign of Battus IV to adopt the cult of Ammon, and consequently his bearded head with the ram's horns appeared on the coinage of Cyrene and then on the coinage of the other colonies.[23] The earliest examples of this Cyrenaean coin are dated to about —500.[24] This reflects mainly the stability of the relations between the Greeks and the Libyan tribes who played an essential role in developing the economy of the Greek colonies in the reign of Battus IV.

The Libyans were followers of Ammon and they were powerful tribes. They spread over a wide stretch in the western desert from Nubia to the North African coast for a long period of time.[25] They controlled a caravan route which ran from Dārfūr to the different oases.[26] This means that they played an important role in transferring the trade from the south to the north across the western oases, when Egypt was badly affected as a centre of commerce during the Assyrian conquest.

The activity of these caravan routes across the western oases led Milne to believe that it was this activity which necessitated the establishment of the Greek colonies on the eastern side of Libya near the southern coast of the Mediterranean, where Cyrene was established in —631.[27]

The remarkable prestige of Ammon is reflected in the spread of his influence to the Greek mainland. This evidently came about as a result of the activity of the last two Battiad kings, who made great efforts to achieve closer relations with the mainland, mainly through trade and participation in the Greek festivals, where the god became known as 'Ammon of Libya'.

The Lacedaemonians are known to have consulted the oracle of Ammon in Siwa more than any other Greeks and there were two temples of the god in Laconia: one was in Sparta, another in Gytheion.[28] The people of Aphytis also honoured Ammon no less than the Ammonians of Libya. It is said that Ammon appeared by night to Lysander, the Spartan general, and told him to cease fighting against the Aphytis.[29]

The Eleans consulted the oracle in Libya and offered libations not only to the Greek gods but also to Ammon. They dedicated altars in the temple of the god.[30] Their questions, the replies of the god and the names of the men who visited the temple from Elis, are engraved on these altars, which were in the sanctuary of Ammon.[31]

The earliest Athenian consultation of Ammon is attributed by Plutarch to Kimon in —451 during his expedition to Cyprus,[32] but the consultation was kept secret and no one knows the purpose for which the men of Kimon were sent to Ammon. Kimon died while his men were performing their sacred mission. It is probable that Kimon tried to obtain a favourable prediction from Ammon.[33]

From the fourth century onwards, we have abundant epigraphical evidence for the increasing devotion to the cult of Ammon in Athens.[34] There is a bronze head in the Louvre, Paris.[35] It is characterized by the traditional ram's horns which serve to identify Ammon. It is some 7.5 cm high and ends in a ring, a fact which clearly demonstrates that the head was a decoration attached to some larger object. It is believed that the head came from Dodona and its style dates it to about the middle of the fifth century before our era.[36] But we must note that the traditional human-headed deity with ram's horns used to identify Ammon is a Cyrenaean conception.[37] It is therefore clear that the head was produced under the Cyrenaean influence and was probably dedicated to the temple of Ammon at Dodona.

If we move from mainland Greece to the Greek colonies in Libya, we find that the colonists continued to worship Ammon in the fifth and fourth centuries. The images on the coins became clearly defined; the silphium plant on one side, the head of bearded Ammon with his ram's horns on the other.[38]

It was the Hellenic conception of Ammon that was chosen for the coinage. Even when Zeus Lykaios appeared on the coinage of Cyrene, after the middle of the fourth century before our era, Ammon continued to appear on the coinage, as the principal deity of the region.[39]

The worship of Zeus was introduced to Cyrene and a great temple in the Doric style was built and dedicated to the god on the hill of Zeus Lykaios in the north-east of Cyrene.[40] It seems, however, that the temple was built as part of Battus IV's programme for political reasons, when after a long period of cruel internal destruction he decided to re-establish the traditions of Greek society for all the colonists in the area in an attempt to restore closer relations with the Greek mainland.[41]

However, Zeus was not chosen for the Cyrenaean coinage until after the middle of the fourth century and was even then represented in his Hellenic coneeption, as a Greek god, not a Libyan one.

There is no doubt that the greatest event in the history of Ammon and his oracle at Siwa was the visit of Alexander the Great to Siwa early in —331. It is reasonable to suppose that Alexander was so impressed by the great historical background of Ammon and the continuity of the prestige of his oracle in the Mediterranean world, that he decided to visit his famous temple.

Notes

1. Pindar, *Pythian*, IV.14, 15.
2. Pindar, *Pythian*, IV.14, 15, translated by J. E. Sandys, *Works*, London, Heinemann, 1968. (Loeb Classic Library.)
3. H. W. Parke, *The Oracles of Zeus, Dodona, Olympia, Ammon*, p. 207, 1967.
4. C. A. M. Fennel, *Pindar, The Olympian and Pythian Odes*, p. 171, 1897.
5. G. S. Conway, *The Odes of Pindar*, p. 107, London, Dent, 1972.
6. It is well known that many princely families of Greece claimed to descend directly from Zeus, 'the father of gods and men'; see L. Whibley, *A Companion to Greek Studies*, p. 304, 1906.
7. See Fennel, op. cit., p. 171, and Conway, op. cit., p. 107.
8. For this study see also A. H. Ghazal, 'The Historical Background of Amùn and his Cult in the Western Oases and in the Libyan Greek Colonies before Alexander the Great', *Bulletin of the Faculty of Arts* (Alexandria University), Vol. XXVI, 1978, pp. 103–26.
9. See O. Bates, *The Eastern Libyans*, p. 190, London, Macmillan, 1914 (reprinted 1970). See also W. W. Tarn, *Alexander the Great*, Vol. II, *Sources and Studies*, p. 349, 1948.
10. W. J. Slater, *Lexicon to Pindar*, p. 39, 1969.
11. Ibid.
12. Ibid.
13. Pausanias, IX.16.1. It is clear that Pausanias had actually visited the oasis of Siwa (cf. Parke, op. cit., p. 211).
14. See Ghazal, op. cit., p. 120.
15. Pausanias, IX.16.1.

16. Plato, *Politics*, 2576.
17. Ghazal, op. cit., p. 121.
18. Pausanias, x.13.5.
19. B. M. Mitchell, 'Cyrene and Persia', *Journal of the Historical Society*, Vol. 68, 1966, p. 108.
20. Ibid., pp. 109–10.
21. Strabo, I.49.56.
22. Xenophon, Hellenica, I.2, 1; Diodorus Siculus, XIII.68, 1; see also Parke, op. cit., p. 212.
23. See E. S. G. Robinson, *A Catalogue of Greek Coins in the British Museum, Cyrenaica*, 1927, pp. xxiii, xxxv, ccxxxiii, Pl. III. 1, 2.
24. Ibid.
25. Bates, op. cit., pp. 101–2.
26. A. Fakhry, *Bahria Oasis*, Vol. 1, p. 27, 1942.
27. G. Milne, 'Trade between Greece and Egypt before Alexander the Great', *Journal of Egyptian Archaeology*, Vol. 25, 1939, pp. 177ff.; the theory of Milne is accepted by Fakhry (op. cit., p. 27) and is rejected by F. Chamoux, *Cyrène sous la monarchie des Battiades*, pp. 60ff., Paris, De Boccard, 1953.
28. Pausanias, III.18.3, 21.8.
29. Pausanias, III.18.3.
30. Pausanias, v.15.2.
31. Pausanias, v.15.11.
32. Plutarch, *Kimon*, 18.7.
33. See Parke, op. cit., p. 215.
34. *IG*, 112, 1415, 1.617; A. M. Woodward, *BSA*, Vol. 27, 1962, pp. 5–6; Parke, op. cit., p. 217.
35. Louvre Museum, Paris, No. 4235.
36. Parke, op. cit., p. 207.
37. Cf. Robinson, op. cit., p. ccxxxiv.
38. Cf. C. Seltman, *Greek Coins*, p. 183, London, Spink & Son, 1977.
39. See Robinson, op. cit., p. ccxxxiv, Pl. XIII, 31, 18, 25; see also C. M. Kraay and M. Hirmer, *Greek Coins*, p. 380, Pls. 215–16.
40. The hill of Zeus Lykaios in the north-east of Cyrene is mentioned by Herodotus (IV.203): he claims that the Persians encamped there, on their return from Barca.
41. See Mitchell, op. cit., p. 113; Parke, op. cit., p. 204.

Potential contact between the central valley of the Nile and the River Niger area in the first seven centuries of the Christian era

J. A. Ilevbare

The part of Africa to be studied lies between the Middle Niger basin and the central valley of the Nile. It stretches from Sansanding in the west to Khartoum in the east, running across modern Mali, Niger, Chad and Sudan, including the northern parts of Burkina Faso and Nigeria. Today, it is a region of little rainfall. Stretching down to the Sudan savannah in the south, its northern area is predominantly the Sahel and the desert. There are indications, however, that early in the first millennium of our era, it received more rainfall and such locations as Kumbi, the metropolis of the ancient kingdom of Ghana, Timbuktu and the Chad basin lay well within the Sudan savannah. As far north as Tibesti, the vegetation was luxuriant enough for camel herding and possibly for raising other large animals, such as donkeys, horses and cattle.[1] And so, the present Saharan part up to the latitude of Tibesti, Ténéré and Aïr would have been of the Sahelian type. The discussion below will deal with that open region at a time when it was covered by grass and shrubs which made contact easier than it is today.

In the open grassland sprang up the ancient kingdoms of Ghana, Mali, Songhay and Kānem. The first and the last seem to have come into existence between the first and the seventh centuries. Ghana enjoyed trading contacts and perhaps exercised some political influence as far as the Atlantic coast.[2] Kanem, situated in the Chad basin, would have traded as far as Dārfūr in Sudan. In Sudan itself, there was the kingdom of Kush with Meroe (and sometime Napata) as its metropolis. Kush lasted for 1,000 years (—650 to +350) with varying degrees of prosperity. Throughout the period of its existence, Cush maintained trading and cultural contacts with Kordofān and Dārfūr to the west and, to the east, with the kingdom of Axum (modern Aksum in Ethiopia) which eventually destroyed it in +350.

Not only was it easy to cross the open stretches of the Sudan savannah, but also there were natural lines of communication along perennial and seasonal watercourses, particularly in the eastern sector between the River Nile and Lake Chad. The Wādī al-Milk runs from the region of Zankor in Kordofān to join the Nile near Debba on the Dongola Reach. Zankor is within easy reach of El Fasher in Dārfūr. The Wādī Howar rises in Tama (ancient Temeh)[3] in

Dārfūr, crosses the Darb al-Arbain route which links Asyūt in Egypt to Ain Farah in Dārfūr through the oasis of Kharga, towards Wādī Gaab and disappears into the desert. Wādī Gaab runs into the Nile at Kerma, also on the Dongola. Ennedi in the north-west of Dārfūr is connected with Tibesti by routes passing through the oases of Selima and Merga.[4] Similar communication lines existed between Dārfūr and Chad and they were still in use in +1240 when King Dunama of Kānem claimed he was in control of all the trade routes between his kingdom and Duwy (Adu on the island of Sai in the Nile).

As indicated above, the horse, donkey and camel are known to have been in use in Kānem, Tibesti and other parts of the Sahara by the first century of our era. Shaw has shown that the donkey is as adaptable as the camel to desert conditions.[5] And so, even if the area had been desert, contact would still have been possible.

For clarity and convenience, the rest of the discussion will be taken in three parts, zone by zone: Adulis–Axum–Cush, Cush–Dārfūr and Dārfūr–Chad–Jenne-Jeno–Ghana. The nature of the evidence available and its scarcity make it difficult to keep rigidly within the first seven centuries of the Christian era. A broad overview in time and space will sometimes be necessary to establish the existence of inter- and intra-regional contact relevant to this period.

Adulis–Axum–Cush

The city of Axum, the metropolis of the ancient kingdom of Ethiopia, was situated in the northern part of the Abyssinian highlands in what is now the province of Tigre, 190 km from the Red Sea port of Adulis (Masawa). Though Axum is not mentioned in Graeco-Roman sources until the first century of our era, Graeco-Egyptian explorers and merchants began visiting the kingdom through the new sea port of Adulis soon after the death of Alexander the Great (—323) in the time of Ptolemy II and III.[6] According to the account of the anonymous author of the *Periplus of the Erythraean* [*Red*] *Sea*, all the ivory from beyond the Nile was at this time brought from Sennar via Coloe (Kohaito) and Axum to Adulis, and was exported from there to parts of the Roman Empire.[7] Adulis became an important commercial centre with a large trade in slaves, gold, ivory, tortoiseshell, animal hides, rhinoceros horns and other products of Ethiopia, Cush and central Africa. In return, Axum and Cush obtained luxury goods such as Egyptian clothes, ladies' robes, coloured cloaks, double-fringed linen mantles, articles made of glass and murra, brass and copper which local craftsmen used for the manufacture of ornaments, cooking utensils, women's bracelets, spears, axes, swords, drinking cups and coins. From India came iron, cotton materials of fine quality, cloth dyes and other

ornaments.[8] Gold and silver plates, military cloaks and coats of skin were sent specially to the royal courts. It is to be expected that, following trade, diplomatic relations would have been established between Axum and Meroe.

Relations between Axum and Cush were not always friendly. From the second century onwards, Axum began to expand westwards at the expense of Cush. Four Axumite inscriptions tell the story of the expansion from the second to the fourth century. One of them which concerns the third century tells of the Axumite expansion into territories between Axum and Meroe, including the Black Noba in the region of Sennar and the gold-producing districts to the south-west of Axum. The aim of the expansion was clearly the control of the gold mines and caravan routes to Meroe and beyond. The great push by Axum coincided with the revolts and civil strife which engulfed the Roman Empire in that century, resulting in the secession of the small kingdom of Palmyra. Indeed, some Palmyran mercenaries from Axum were captured by Roman forces in Egypt in 274. The expansion followed the decline of Cush which had lost the 'Island of Meroe' to the Black Noba.[9] Early in the fourth century the king of Axum sent an expedition against the Noba.[10] The final objective was the capture of Cush. In 350, King Ezana achieved this ambition. He was then able to proclaim his sovereignty, not only over the 'Island of Meroe', but also over the entire kingdom of Cush.[11] The dispossessed princes were consequently forced to flee westwards to Dārfūr.

Cush–Kordofān–Dārfūr–Ennedi

Identical rock paintings found in the valley of the Nile, Ennedi, Tibesti and Fezzān indicate early contacts dating back to the Mesolithic age among the hunters in the eastern half of what is now the Sahara Desert.[12] Petrographic analysis of potsherds from widely separated sites such as Khashm al-Girba on the Ethiopia–Sudan border, Khartoum, Debba, Wādī Halfa, Wanyanga in Chad, Amekni and Meniet in Ahaggar reveals a similarity that points to the continuation of such interactions during the neolithic period.[13]

Perhaps the earliest documentary evidence for trade between Cush and Dārfūr comes from inscriptions[14] on the tombs of Egyptian kings of the VIth Dynasty (—2423/—2242). In their time, especially under Mernere and Pepi II, caravan leaders made several journeys south-westwards to the kingdom of Yam and the land of Temeh which Arkell identifies with Dārfūr and Tama respectively.[15] One of such leaders was Harkhuf. Harkhuf spent eight months on one of the several journeys he made. It seems he took the caravan route of Derib al-Arbain, from Asyūt through the oasis of Kharga towards El Fasher. But the return journey is more important to us. On one occasion, Harkhuf came back via Irtet, Mekher and Tereres; and on another, he was conducted

homewards by an escort from Yam through the territory of Irtet, Setu and Wawat. He would have been taken along the Wâdī Howar and Wâdī Gaab to Kerma, then through the Nubian people, the Wawat, between the second and third cataracts to Elephantine where he could embark on boats downstream. The escort from Yam demonstrates the existence of regular contact between Tama, Dârfūr and Ennedi on the one hand and Cush on the other through what may have been one of the many natural communication routes which must have remained in use until the era of motor roads and railways. Seven hundred years later, another Egyptian king, Tuthmosis IV (—1425/—1405), raided the territories of the Irm, Gwrss and Trk, names which are associated with Dârfūr.[16] Egyptian kings of the XXVth Dynasty (—725/—660) who originated from Cush, would have consolidated trade with that region which they may have annexed to Cush.

Harkhuf came back with 300 donkeys laden with frankincense, ebony, leopard skins, slaves, gold and ivory. These commodities are strikingly similar to those which constituted the main traffic between Cush and Axum between —300 and +350 as discussed above. In the face of this evidence, it is tempting to assert that traders of Cush and Axum were only carrying on the trade that had existed with central Africa as far as Dârfūr and Ennedi for more than 2,000 years. What Harkhuf gave in exchange is not known. However, from what the kings of Axum, Cush and indeed African princes of the fifteenth to nineteenth centuries were to receive in similar situations, it may be assumed that he gave mainly luxury goods such as those mentioned above.

Perhaps, the most momentous event in this zone was the conquest of the kingdom of Cush in +350 by King Ezana of Axum. The princes of Cush had to flee westwards to Kordofân and Dârfūr. Arkell has also shown that the name 'Cush' ceased to be used except in these two areas.[17] The Nubian-speaking peoples of Kagiddi or Shelkota of southern Djabal Meidob, the Kaj of northern Kordofân and the Kajjar or Birgid of central Dârfūr seem to be immigrants from Cush and their names (Kash or Kaj) appear to be a survival of the word 'Kush'. A graffito in Greek characters and the old Nubian language from Awdum in northern Kordofan show that the name 'Cush' was still used there from the fifth to eighth centuries of our era. The Kagiddi have a tradition of having migrated from the east under the leadership of a queen who is buried in a large mound near Djabal Kaboija at the south-eastern corner of Djabal Meidob.[18] It is further suggested by Meek, Arkell, Oliver and Fagan, though disputed by Posnansky, that the Tumagera, who founded several kingdoms in Tibesti and Kânem in the territory west of Dârfūr, were the scions of the Meroitic royal family; and that the rise of divine kingdoms along the great east–west road across Africa was due to them.[19]

Dārfūr–Chad–Jenne-Jeno–Ghana

The traditions of the eastern origin of Bayadjidda, the conqueror of Kānem by —700 and subsequently of Hausaland, seem to give credence to the contact between Dārfūr and the Chad basin as well as the area west of it. According to one of them, Bayadjidda is said to have been a refugee from Baghdad. He settled for a time in Kānem where he married the daughter of the ruler, the Mai. To escape the treachery of his father-in-law, he had to flee westwards to Gaya where a community of blacksmiths forged him a sword with which he proceeded to slay the snake, Sarki, which had not allowed the people to draw water except on Friday.[20] It is known that the Kanuri on Lake Chad were a mixture of the Zaghâwa and their predecessors, the So. According to Urvoy, Trimingham and Levtzion, the Zaghâwa were nomads who came to Kānem from the desert,[21] perhaps from the Dārfūr–Ennedi region where some of them were still to be found as late as +1500. They conquered the So who had themselves subdued the people they found there. The word 'So' seems to be a derivation of 'Shu' or 'Show', the Egyptian sun-god, who was sometimes given the epithet 'lord without limit'; and with him the king of Cush was associated.[22] Was it a refugee prince of Cush bearing the title Show or So who proceeded from Dārfūr to subjugate the inhabitants of the Chad basin? The hypothesis is very attractive but must await proof. Be that as it may, by +700, the Zaghâwa had imposed their rule on the So and the government was, like that of Cush, headed by a divine ruler.

From the realm of conjecture inherent in oral tradition, we may retrace our steps to consider what evidence may be gleaned from archaeology. The focus here will be the kingdom of Ghana and the flooded region of the Niger delta above Timbuktu. In the inland Niger delta there was a settlement at Jenne-Jeno. Excavations on the site by McIntosh have shown that it received the first settlers about the third century before our era.[23] The discovery of iron at the basal level of the site indicates that between the first century before and the first century of our era, iron technology reached the town, possibly via a western route from Dhār Tichīt in Mauretania where, perhaps, the earliest Libyco-Berber iron users had appeared between the seventh and the fourth centuries before our era.[24] If the nearest source of iron ore, as suggested by McIntosh,[25] is Benedougou (Bonkoukou), trade in iron between the two regions is likely to date back to soon after the foundation of Jenne-Jeno. Copper found in the earliest Phase III deposits is dated to the fifth century of our era. The three nearest sources of copper ore known are in the Sahara at Akdjudjt in Mauretania, Nioro in Mali and in Aïr.[26] Even if copper was not smelted in Jenne-Jeno by the fifth century, there is evidence for the existence of pre-Islamic copper industry at Maradet in Aïr.[27] Other copper furnaces of the sixth century existed in the district of Sekkiret near Azelig in the Niger.[28] What emerges from the above is strong

evidence for inter-regional trade in iron and copper from Mauretania in the west to the Niger in the east. Similar traffic in iron must have existed between Chad and Meroe from where iron smelting in domed and shaft furnaces is believed to have spread to parts of West and central Africa.[29]

The ancient kingdom of Ghana played an important role in the trade in metals, espccially gold. The rise of Ghana has been dated to the third century of our era. By the eighth century, its metropolis, Kumbi, had grown into a thriving commercial centre. Situated in the Senegal–Niger divide, it was well placed to take advantage of the north–south and the east–west currents of trade, and of the new ideas and cultural contacts emanating from the great civilizations to the north and east. Kumbi appears to have derived its early importance from its control of the trade in gold from its source in the mines of Wangara in the upper course of the River Niger in Guinea and possibly from Asanti in modern Ghana. Kumbi would have extended its trading activities to the Atlantic[30] in the west and beyond Timbuktu in the east.

As indicated above, Kumbi was not as dry at that time as it is today. It had enough rainfall to enable it grow sufficient food to feed its people and the trading communities in its midst. As for Jenne-Jeno, the annual flooding and the consequent fertility may be compared with those of the Tigris and Euphrates basins and the Egyptian Nile valley. Like these, it no doubt produced enough food for local consumption and export. The region is linked by perennial waterways with the great Niger bend between Timbuktu and Gao which was (and still is) the contact point of traders from the north across the Sahara and from the east and west along the great highway.

The rise of the kingdoms of Ghana, Kãnem, Cush and Axum, as well as other smaller, well-organized and warlike communities which may have existed in the Sahara, in Tibesti, in Aïr, in Ennedi and Dārfūr, almost certainly created a great demand for iron, copper, tin and gold. Hence the diffusion of metal-smelting techniques all over the region. It is not for us here to probe the source of this knowledge. Whether iron smelting came from the east through Egypt or Axum and then through Cush to Sudan or from the north and north–west across the Sahara or even from the west by sea, suffice it to say that iron technology created a community of interest across Sudan and became a stimulus to communication.

Conclusion

In sum, there are strong indications that trading contacts existed all the way from the Atlantic seaboard to the port of Adulis (Masawa) on the Red Sea. The main highway went mostly through the Sudan savannah. It is not known if individuals made the whole journey from east to west. However, it is clear

that trade was carried on in relays across Africa. Certain articles in universal demand such as ivory, iron, gold and copper were exchanged all the way. Princes of the kingdoms of Axum, Cush, Kanem and Ghana promoted the trade in these commodities.

Notes

1. For the vegetation of the Timbuktu region around —425/—400, which was clearly Sudan savannah, see the Greek historian Herodotus (II.32.6–7). On Kumbi, G. T. Stride and C. Ifeka, *Peoples and Empires of West Africa*, p. 40, London, Nelson, 1969; and on Tibesti, B. D. Shaw, 'The Camel in Ancient North Africa and the Sahara: History, Biology, and Human Economy', *Bulletin de l'Institut Fondamental d'Afrique Noire* (IFAN) (Dakar), Series B, Vol. 41, No. 4, p. 706, 1979; but in particular, A. E. Close, 'Radio-carbon Dates from Northern Africa', *Journal of African History (JAH)*, Vol. 21, No. 2, 1980, p. 152.
2. Cf. Carthaginian trade in gold (Herodotus, IV.196) possibly at the mouth of the Senegal river.
3. A. J. Arkell, *A History of the Sudan from the Eearlist Times to 1821*, pp. 43, 81, 175, 178, London, London University/Athlone Press, 1961.
4. Ibid., p. 192.
5. Shaw, op. cit., p. 706.
6. L. A. Thompson, 'East Africa and the Graeco-Roman World (to A.D. 641)', in L. A. Thompson and J. Ferguson (eds.), *Africa in Classical Antiquity*, p. 56, Ibadan University Press, 1969.
7. C. Müller, *Geographi Graeci Minores*, Vol. I, p. 261.
8. Ibid., pp. 261–3.
9. Thompson, op. cit., pp. 57f.
10. W. Dittenberger, *Orientis Graeci Inscriptiones Selectae*, p. 199.
11. Ibid., p. 200.
12. P. Huard and Petit, 'Les chasseurs-graveurs du Hoggar', *Libyca*, Vol. XXIII, 1975, p. 165.
13. T. R. Hays and F. A. Hassan, 'Mineralogical Analysis of "Sudanese Neolithic" Ceramics', *Libyca*, Vol. XXII, 1974, pp. 157–64.
14. J. H. Breasted, *Ancient Records of Egypt*, pp. 316–8, 333–5, Chicago, University of Chicago Press, 1906.
15. Arkell, op. cit., p. 43.
16. Ibid., p. 61.
17. A. J. Arkell, 'An Old Nubian Inscription from Kordofan', *American Journal of Archaeology* (Boston), Vol. LV, 1951, pp. 353–4.
18. Arkell, *History of the Sudan* . . ., op. cit., p. 174, is closely followed here.
19. C. K. Meek, A Sudanese Kingdom, London, Kegan Paul, 1931; Arkell, *History of the Sudan* . . ., op. cit., pp. 177, 192; R. Oliver and B. M. Fagan, *Africa in the Iron Age*, London, Oxford University Press, 1975; M. Posnansky's review of Oliver and Fagan, op. cit., in *JAH*, Vol. 21, No. 2, 1980, p. 629.
20. Stride and Ifeka, op. cit., p. 86.
21. N. Levtzion, *Ancient Ghana and Mali*, pp. 7–8, London, Methuen, 1971; Y. Urvoy, *Histoire de l'Empire du Bornou*, pp. 17ff., Dakar, 1949; J. S. Trimingham, *A History*

of Islam in West Africa, pp. 106, 110–11, London, Oxford University Press, 1962.
22. Arkell, *History of the Sudan . . .*, op. cit., p. 176.
23. R. J. McIntosh and S. K. McIntosh, 'The Inland Niger Delta Before the Empire of Mali: Evidence from Jenne Jeno', *JAH*, Vol. 22, No. 1, 1981, p. 1.
24. P. J. Munson and C. A. Munson, 'Nouveaux chars à bœufs rupestres du Dhar Tichit', *Notes Africaines*, Vol. CCXXII, 1969, pp. 62–3.
25. McIntosh and McIntosh, op. cit., p. 19.
26. A. Mauny, 'Tableau géographique de l'Ouest Africain au Moyen Age', *Mémoire de l'Institut Fondamental d'Afrique Noire*, Vol. 61, 1961, p. 307.
27. M. Posmansky and R. J. McIntosh, 'New Radio-carbon Dates for Northern and Western Africa, *JAH*, Vol. 17, 1976, p. 183.
28. D. Calvocoressi and N. David, 'Radiocarbon and Thermoluminescence Dates for West Africa', *JAH*, Vol. 20, No. 1, 1979, p. 9.
29. D. Williams, 'African Iron and the Classical World', in Thompson and Ferguson (eds.), op. cit., pp. 74f.
30. See note 2 above.

Possible contacts between the central valley of the Nile and the River Niger area

Boubé Gado

It is not our intention here to carry out an exhaustive study of possible contacts between the central valley of the Nile and the River Niger area, but rather, through a careful examination of the original traditions, myths and cosmogonies of certain peoples of the River Niger area (see Fig. 1), to see how the hypothesis of such contacts sheds fresh light on the history of its peopling, while enabling us to draw comparisons, see similarities and make cross-checks, which may suggest new lines of research for the historian through a more rewarding rereading of some of the oriental sagas, be they Yemeni, Egyptian or Ethiopian.

For this reason, we shall begin by examining the historical traditions of the Soninke of the Empire of Wagadu, more widely known as the Empire of Ghana. The history of the Soninke is considered here as a 'primordial history', one which influenced all 'spoken history' throughout western and central Sudan, both because of its real or supposed anteriority, and because of the language used by the *gessere* (story-tellers) to 'recount this history'. Thus they became the keepers of the word and guardians of the language and were entrusted by many peoples in the region with the task of 'telling their history' and even, paradoxically, 'telling' it in Soninke and then retranslating it into the language of their listeners, as occurred among the Songhay and the Zarma in the central valley of the Niger.

It is precisely the original traditions and cosmogonic myths of the Songhay and the peoples who, along with them, still occupy today the area of the central valley of the Niger River which will hold our attention during this criss-crossing of history and myth from the banks of the Niger to the Nile, an exercise that, we hope, will be of some use to the historian.

Traditions of origin in 'history which is recounted'

A major tradition—the saga of Dinga Kore, the Elder, ancestor of the Soninke

The *gessere* Diare Sylla of Yerère[1] tells us that Dinga Kore, 'Dinga, the Elder', the patriarch of the Soninke was born in Hindi (India?), grew up in Yamani (Yemen?), lived at Kiridio and at Seden (Arabia), at Dyagaba and Luti (Misr = Egypt) where he married Fatun Ganessi, a fair-skinned woman.

Dinga Kore was black and he was a hunter and warrior. He moved west from Egypt with his slaves, his *gessere*, his forces armed with bows and lances and his magicians, and among them there were men with black skins and men with fair skins. Dinga Kore took the villages by force and made the women pregnant, thus spreading his progeny along his route.

He stayed at Dalangumbé (15 km from Nioro in present-day Mali) where he set up his main altars which consisted of three jars. Then he left for Diafunu and later went to Yurugumbé (40 km from Nioro) where he conquered 'a female genie' and married her three daughters. The eldest of the daughters gave birth to Trikinye Skhuna, the second produced Trimpilla Khala and the third Jabe Sise.

Then Dinga Kore returned to Egypt and settled at Sonna where he died. This is why his descendants were called '*Sonna nke*' or 'those from Sonna' or Soninke. But before dying, he made a pact with the hyena and the vulture, according to which the latter would show his descendants the site of Kumbi where they would prosper.

However, before the death of the patriarch, his youngest son, Jabe Sise, stole his father's secrets from his elder brother, Trikinye, with the assistance of Suduro, a servant, and also of Dinga Kore himself who valued the noble-heartedness of Jabe Sise.

With the assistance of the hyena and then the vulture, Jabe Sise reached the promised land and settled at Kumbi where he found the Wagadu Bida, 'a genie-child' of Dinga Kore who had assumed the form of a python and with whom he established the alliance which made Kumbi prosperous, in return for the annual offering to the python Bida, of the most beautiful virgin of Wagadu, but never a female descendant of Dinga Kore.

The Wagadu Bida gave Jabe Sise four drums, one of gold, one of silver, one of copper and one of iron, at the sound of which four cavalry corps appeared from the four points of the compass and their leaders became the four *fado* of the empire, 'heads of provinces', and lieutenants of Jabe Sise.

At the time of each annual offering, he caused 'a shower of gold' to fall on Wagadu.

There were originally six 'noble clans' or *wage* among the forty-four clans of the Soninke of Wagadu, namely the Sise, the Khama, the Dia, the Berete, the Ture and the Suguna, but it was always the Sise, the descendants of Jabe Sise, who inherited the throne of Wagadu.

The king of Wagadu was the *kaya maghan* (because the *gessere* called Jabe Sise *kaya* and his father *maghan*, that is to say 'the courageous warlord'). He was also the *tunka* (i.e. the chief) and Sise Tunkara (because Sise was the first *tunka*, i.e. the first chief or first king).

After the annual offering and the shower of gold which followed, it was the task of the Kagoro who were Khusa to collect the gold for the *kaya maghan*. These Kagoro, whose descendants include the Kamara, the Folana, the Sumare and the Jariso, were the inhabitants of Wagadu before the arrival of Jabe Sise who subjugated them and assimilated them to the slave clans that he had brought with him.

Trikinye, the unfortunate elder brother of Jabe Sise, settled at Tringa, near Yelimane, and the Garanke or Garassa cobblers are descended from him.

But while Wagadu prospered, the year came when Siya Yatabare was to be given as an offering to the Wagadu Bida. She was loved by Maḥamadu the Silent, a *wago* on his mother's side, who, on the day of the ceremony, chopped off the head of the python Bida which was renewed seven times. The head flew off, crying out:

> Seven stars, seven shining stars,
> Seven famines, seven great famines,
> Seven winters, seven whole winters,
> No more rain will fall in the country of Wagadu
> and still less gold

whereupon the head fell in the province of Bure which has been a gold-producing area since that day.

Thanks to the assistance of his maternal uncle, Wakkane Sakho, Maḥamadu the Silent escaped the wrath of the *wage* of Wagadu. When the death of the Wagadu Bida ensured the ruin of Wagadu, the inhabitants migrated in three directions: some travelled towards Lake Debo, Timbuktu and Jenne; some towards the Sahel and the area of Kiffa; others went south where they founded Kuri, a large city 200 km from Kumbi, which they subsequently abandoned under the threat of drought.

Thus, while it remains silent on Wagadu's days of glory and then describes in great detail the brutal ruin and breakup of Kumbi and Wagadu, the legend of Wagadu, which recounts traditions concerning the origins and the formation of the Soninke communities and the Empire of Wagadu, dwells at length upon the places in the migratory journeys of the original ancestor,

Dinga Kore, and the socio-economic conditions which led to the establishment of the empire.

Migrations along the Great River

After this 'primordial migration' by Dinga Kore, the Elder, from 'Arabia' and from 'Misr', we now turn to the traditions concerning the origins of populations in the central valley of the Niger river.

The Songhay sequence upstream on the Great River

The origin of the Sorko (the Dienké, the Korgoī or Tombo and the Kurnkoī) according to the Ta'rīkh al-fattāsh[2]

One day, Ouj, the son of Na'nāk, a giant who lived in the time of the Prophet Noah, had a seminal discharge which was mistaken for a river by the five wives of Noah, all daughters of Siri, who bathed in it and became pregnant. Massi gave birth to a son Dienké and a daughter Meibunun; Sura gave birth to a son Bobo and a girl Siri; Katu gave birth to a son Tombo and a girl Hubo; Diara gave birth to a son Kurunkoī and a daughter Sāra; Sabata gave birth to a son Sorko and a daughter Nāra.

The cousins then married and: Dienké and Siri became the ancestors of the Dienké; Bobo and Meibunun, the ancestors of the Bobo; Tombo and Nāra, the ancestors of the Korgoī; Kurunkoī and Hubo, the ancestors of the Kurunkoī; Sorko and Sāra, the ancestors of the Sorko.

But while Bobo and Korgoī 'reached the bush with their children', Dienké, Kurunkoī and Sorko 'went into the interior of one of the islands formed by the river' where, under the threats of a king of the Beni-Israel, Dienké and Kurunkoī resorted to trickery and forced Sorko and practically all his offspring to surrender to the enemy while they hid and then scattered 'in every direction until they arrived here' with 'a small number' of the sons of Sorko who managed to flee with them.

According to Houdas and Delafosse,[3] one reads in the Lisān' al-Arab that

> 'Udy ben 'Uq was a man remarkable for his tall stature and his ugliness. It is said that he was born at the time of the fall of Adam, that he lived until the time of Moses and that he perished during the life of Moses. It is said that 'Udy ben 'Uq was with the pharaohs of Egypt and it is asserted that it was he who wanted to dash the army of Moses under a rock and that he was killed by Moses.

The origin of the Songhay (the Wakore, the Wangara and the Meīnga) according to the Ta'rīkh al-fattāsh[4]

Three sons of Taras ben Harūn, king of Yemen, left their country and emigrated to Tekrūr in order to escape the exactions of their father's successor, their uncle, Yasri ben Harūn.

The elder, Wakore ben Tarās, married to Amina bent Bakht, became the ancestor of the Wakore or Soninke whose 'elder Wakore was their king and they gave him the title of Kayamaga'.

The second son, Songhay ben Tarās, married to Sara bent Wahb, became the ancestor of the Songhay.

The youngest, Wangara ben Tarās, who was not married, took as a concubine Sukura, one of the two slave women who were with them, and became the ancestor of the Wangara or Mande ('Mandingo').

And their slave, Meīnga, was married to Kussuwa, the second woman slave, and became the ancestor of the Meinga or Maīga of Songhay.

The origin of the kings of Songhay according to the Ta'rīkh al-fattāsh[5]

One of the female descendants of Djabir ben ʿAbdallāh al-Anṣārī had two daughters in Medina. One day, the two sisters left Medina to go to their garden and felt thirsty. The elder sent her son to look for water and, on his return, he met his aunt first but refused her the water.

His mother, displeased by her son's gesture, 'rejected him along with the water which he offered her'.

The child fled into the desert and his aunt, feeling responsible for the incident, went after him.

Captured by Christians, the aunt remained with one of them who was a blacksmith and bore him an illegitimate daughter. The blacksmith then married her and they had a son. The illegitimate daughter grew up and also had a son. Learning of the misfortunes of their mother and grandmother, the uncle and nephew left to search for the first runaway and arrived in 'Sudan and found him at Gao'.

'Now the people of Gao had no ruler apart from the great fish which revealed itself to them from mid-morning until midday, after which they returned to their homes.'

When the two young people reached their cousin, the one who was his first cousin, that is to say the son of his aunt, said to him: 'I will make you something with which you will be able to kill this fish and thus reign over the people.' He then made him a *damé* (harpoon) by means of which his first cousin killed the fish and became the king of the country, respected and obeyed by all.

'Then, the son of the cousin of the other two made him a drum to beat; he was the ancestor of those who became the Dan, which is the name of a Songhay tribe. . . .

'The other one became the ancestor of all the blacksmiths attached to the Diam-Kiria.'

Djabir ben ʿAbdallāh al-Anṣārī is said to be

one of the inhabitants of Medina who left their countrymen to become in 621 the *anṣār* (helpers) of Muḥammad. Djabir ben ʿAbdallāh al-Anṣārī is well known as an originator of traditions: among the traditions attributed to him is one concerning an obligation not to give anyone a drink before having satisfied the thirst of one's father and mother—this tradition bears a certain resemblance to the story told of the child who was later to become the first king of the Songhay.[6]

The origin of the dynasty of the Diāber-Banda according to the Ta'rīkh al-fattāsh

Scholars say that four men in the army of 'Umar ben ʿAbdelaziz (May God show His satisfaction with him!) left Yemen and stopped at Bornu. They killed the rulers of Bornu, and one of the four men, named Idrīs, settled there.

The others continued as far as Kūkya, where Diāber al-Yemen settled and married Weīza-Kūkya and had children by her. The origins of the Diāber-Banda go back to him.

The two others carried on as far as Biru, 'where one of them', Sulaymān al-Faris, married the daughter of a *kaya maga* and had children by her. The Askiya branch goes back to him. The fourth, called Saīd al-Anṣār, reached Bâgana and married a Fulani woman by whom he had children. The origins of the Macina people go back to him. It is also said that the first town in the Sudan was Kūkya, the second Arham, the third Biru and the fourth Miza, after which came Kabara, Timbuktu and the other settlements.[7]

The origin of the 'diou'a', 'diua' or 'dia' dynasty according to the Ta'rīkh al-fattāsh

Formerly, the rulers of Takrūr were mostly pagan and practised the religion of the priests who lived at Gao; but, at that time, that is to say towards the middle of the fourth century (end of the tenth century of our era), Gao was on the bank of the river located near Gurma. Those kings bore the title of *diou'a* or *diua* or *dia*, forms of the verb 'to come' . . . at a time when the people of Gao still lived on the other side of the river, crossing it in canoes and landing at the spot where the town is located today on the bank of the Hausa. . . .

One day, when the people of the town had gone to that place they spotted the footprint of a man, three cubits long and two cubits wide. Each toe of the foot was as long as two handbreadths. Frightened by the sight, they hurriedly returned, full

of terror, to their town, without actually having seen the individual, and told their fellow-citizens what they had seen.

The town notables then gathered with some of their subjects, crossed the river and went to the spot where the footprints began; they then followed their path and finally found, lying under a tree, a man such as they had never seen before, both in terms of his height and the perfect nature of his form. The man was of gigantic proportions and dark-skinned with a huge stomach and head and, in his hand, he held a stick with an iron knob.

The townspeople greeted the giant who replied to them in Arabic, a language which they did not understand. 'Where do you come from?' they asked him. He indicated a point to them, saying 'I come from Yemen', and in their ignorance of the Arabic language, they thought that he had said he was called *dia*. He soon became friendly with them, and when they indicated by signs that he should follow them to their town, he did so, until they arrived at the river and their canoes.

But, astonished and puzzled at the idea of getting on board, he withdrew, refusing to accompany them because of his fear of the river, and returned to the place where they had found him, while the inhabitants of the town went home in their canoes.

But they began to visit him frequently and they brought him food and everything he asked for. He lived by hunting wild animals, competing in his running speed with giraffes and sometimes chasing ostriches. He gradually made friends with the people of the village who visited him to observe his height and built a house for him on that spot. One day, he coupled with one of their slaves and she became pregnant. The slave's master gave her to him as a gift; she stayed with him and bore him a son who resembled his father in terms of height and perfect form. As he grew up, the child learned to speak the languages of his father and his mother. He spent time with the local people and they with him, and, soon, a number of inhabitants left the town, group after group, to go and settle beside the father. They eventually formed a settlement at the place where he lived. His child took a wife among them. He then put himself at their head and became their respected ruler. He fought the Arab nomads of the neighbouring mountains single-handed as iron could not pierce his body.[8]

The origin of the Za dynasty according to the Ta'rīkh al-Sūdān

The name of the first Prince Zâ-al-Ayaman comes from the phrase '*Ja min al-Yemen*', meaning, 'he came from the Yemen'. Indeed, the story goes that this individual had left the Yemen, accompanied by his brother, to travel the world and that fate had led the two travellers to the town of Kūkya, a very old city built on the edge of the river on the territory of the Songhay. This town was already in existence in the time of Pharaoh and it is said that it was from there that he brought the troupe of magicians whom he used in his quarrel with Moses (God save him!).

The two brothers arrived in Kūkya in the most pitiable state. They had completely lost their human form, so to speak, being so dirty and exhausted, and their nakedness was only hidden by shreds of animal skins thrown over their bodies. When they were asked where they came from, the elder one replied: 'He comes from the Yemen' (*Ja min al-Yemen*). From that time on, it has only been pronounced

as '*Zâ-al-Ayaman*', the pronunciation of the sentence that had been spoken being altered by the local people who found it difficult to reproduce the sounds, since their barbarous dialect thickened their tongues.

Zâ-al-Ayaman remained at Kūkya. He became aware that the populations among whom he was living were pagan and only worshipped idols. The devil showed himself to them in the form of a fish with a ring through its nose, which appeared above the waters of the river at certain times. All the people would then go in a crowd to the animal to worship it; the fish would issue its orders and prohibitions, and then people would disperse; everyone did what they had been told to do and refrained from doing whatever they had been forbidden to do.

After attending this ceremony and realizing that the people had clearly taken the wrong road, Zâ-al-Ayaman decided to kill the fish and carried out his plan:

One day when the animal appeared, he threw a harpoon at it and killed it with God's help. The people then swore their allegiance to Zâ-al-Ayaman and made him their king.

It is asserted that this prince was a Muslim and the action which has just been described is given as evidence; it is also said that his successors renounced the faith; but we do not know which of them was the first to set an example of apostasy. Nor do we know at what period Zâ-al-Ayaman left the Yemen, nor when he arrived at Kūkya nor what his real name was.[9]

The origin of the Songhay in the Téra tradition

When the Songhay left the Sahel, they went to Tendirma; there they found the Mallantché. The Mallantché chief of the time was called *kaya maga*, although the Wangara and the Mosi called him *kaya maga*. Furthermore, the one whom the Songhay found at Tendirma was a Sorko. The Sorko was called Tinda, his wife was Marwa, and his eldest son was Hâssi. . . . The Songhay and the Mallantché thus lived together, and the power of the former was increased by the arrival of several Mosi and Wangara archers who came to join the Songhay. In the end they formed as many as twelve units. Then the Songhay and the Mallantché did battle; the Songhay won and brought the country of the Mallantché under subjection. As a result of this the Mallantché went back to Mallé.[10]

Zabar Kaan and the migrations of the Zarma

Zabar Kaan came originally from Sini. When Muḥammad established Islam, Zabar Kaan went to Mecca and became a convert. On returning home, he tried in vain to convert the people. He then raised an army and fought for forty years. His enemies turned to the Tooru for aid and managed to capture his daughter. Muḥammad asked him to come and live in Mecca.

Zabar Kaan's anxiety did not, however, begin to dissipate until Umaru, Usman, Abū Bakr and Alihu went to war and brought back his daughter. Yet after seven months of patient waiting in Mecca for someone to ask for his daughter's hand, Zabar Kaan could wait no longer and asked Muḥammad for

permission to leave the country, promising that he would remain ever faithful to Islam.

He battled his way as far as Mallé, and there he settled. At the time of their coming to Mallé, the Zarma were called *mallinké kaanyeeni*, which means 'the golden race', or 'the pure race'. The *ganji*, the Tooru, the spirit that haunted the pond of Mallé, was called Zarma. The Tuareg and the Fulani, who were lords of the region, called these foreigners Zarma, after the spirit of the pond, since they considered the name *mallinké kaanyeeni*, 'the golden *mallinké*' too fine for them.

These lords of the region were so demanding that Sambo, son of Zabar Kaan, ordered the killing of the Tuareg and Fulani children who had developed the habit of wiping their bodies with the clothes of Zarma children after bathing in the pond.

The Zarma had seven drums: Sombon Kaan Tuballe, Bonkaano Tuballe, Bonkaano Bilbilo Tuballe, Alfa Tuballe, Bilbilo Tuballe, Katia Tuballe and Nassoro Tuballe. 'Sombon Kaan Tuballe was the first drum because it was of gold: the wood from which it was made was golden, the skin stretched over the wood was golden, gold was the drum stick with which it was beaten, and gold was the cord on which it was hung.'

The other *tubal* were ordinary drums with skin stretched over a large wooden bowl.

When Sombon Kaan Tuballe was played, all the Zarma, only thirty horsemen altogether, took up arms in response to the call. Sambo Zabar Kaan therefore called the Zarma together to tell them what had been done; the group decided to emigrate to avoid reprisals. Their slave, Almin, who was master of the Korte, had them make a barn floor out of sekko, a *daba* which accommodated all the Zarma. Almin made the *daba* which took off, and only the Bull of Almin travelled in the flying *daba*.

The Zarma passed one night at Ciri Babanni, a night at Cikaldo Cikal Bonjeri, a night in Nafadeyzé, a night in Bonzie, a night in Timbuktu Kooyu, a night in Timbuktu Tukunnya, a night in Safana, and they landed at Aderambukane, where Bulonbooti, a brother of Sambo, betrayed his kin, joining with the Tuareg. He became the ancestor of the Dawsaaney of Azawek.

The flying *daba* took the Zarma to Kobi, and Saptâka, then to Sargan, where it remained.

Sambo Zabar Kaan begat Tatu, Tatu begat Zarmalle, Zarmalle begat Mali Kamandugsa, and Mali Kamandugsa begat Taguru. It was around the time of Mali Kamandugsa that the Zarma dispersed, and it was the children of Taguru who formed the Zarmatarey, the historical Zarma settlements.

The Borgu–Hausa cycle of the lower reaches of the Great River

The Kisra migrations

The traditions of a number of ethnic groups including the Bariba of Borgu, the Yoruba and the Bade began with 'Kisra' or 'Kishra', a man of Egyptian or Arabic origin who resisted the *djihād* of the Prophet Muḥammad and led an assortment of peoples through a series of victories from Badar, near Mecca, to Bornu in the land of the Hausa, and to Borgu.

The Borgu traditions.[11] Most versions of the Kisra migrations insist on the fact that three brothers, all sons of Kisra, were the ones who established Wasangari power at Illo, Bussa and Nikki.

Woru Bate, the eldest brother, settled in Bussa; Woru Mansa, the second, in Nikki, and Agusa, the youngest, settled in Illo. Woru Mansa was known also as Sero Sikia; after his rise to power he was called Sunon Sero (in the Botonu language the title '*sunon*' means 'chief, sovereign, king'); he was also called Sero Temtoré (the title *temtoré* being a variant of the word '*tontoré*', meaning 'founder'), as well as Sero Duabaga, Sero Gidigi and Sabi Wuré.

Woru Mansa, a great hunter of elephants and a generous provider of meat, left Bussa accompanied by his sisters, one of whom was Due Sikia, and his sons Waru Ginnin and Simé Bankpêou, later called Dobidia.

The hunting skills and the generosity of Woru Mansa's group allowed him, after a stay at Gbaoki, to assert his power over his hosts Batonba, Waba, Boko and Nupe Takpa of the Nikki-Wen region, though they had already elected a chief, Sunon Barusonga. This chief, in any case, must have put up a fierce resistance to the immigrants, since certain traditions have it that Sunon Sero alias Woru Mansa, and his sisters Yon Dave and Buyon, buried themselves in order not to live through a grave situation that would later be resolved by his son, Simé Bankpêou, called Sunon Dobidia, a *nom de guerre* that derives from '*Siku dobi teni d wa*', 'we are going to eat this millet'—which was Bankpêou's victorious exclamation after the battle of Tasibori, before the fields and barns abandoned by Sunon Barusonga.

It was Prince Sabi Simé who founded the cavalry at Nikki, for his nickname 'Bankpêou' is explained by the fact that he was so fond of horse-riding that he was compared to the *bankpêou*, the bird which follows the flocks, perching on the backs of the animals.[12]

Yoruba traditions. Certain Yoruba traditions[13] distinguish two basic waves of migration. The first great wave was part of the Kisra migrations. Arriving in what is now northern Nigeria, the wave of Yoruba crossed the confluence of the Benue and the Niger, leaving an Igara colony near Idah. The main body pressed on as far as Ekiti, and some went further south, to found the Idoka branch.

The second great wave of Yoruba migration is called the Oduduwa. This is the wave of which tradition tells us most. Oduduwa features in it as a hero who crystallized Yoruba resistance to Islam.

Other, complementary traditions[14] hold that the Yoruba had once formed a single ethnic group with the Bariba, the Tienga and the Gurma in one great wave of migration from the region of Mecca. Their monarch Kishera, king of Badar, who was fighting the troops of the Prophet Muḥammad, waited in vain for reinforcements from the king of Bornu.

He was defeated and killed, and his son led his people westwards across the Sudan. Part of the wave split off and settled at Bussa, another group settled at Nikki, and a third at Illo, each under the leadership of one of three brothers, the three sons of Kishera; a fourth group descended the Niger as far as Illorin and the southern lands. This was the nucleus of the Yoruba.

The Gobir traditions

The Gobirawa, inhabitants of Gobir, have passed down a version which is very close to the Kisra tradition. . . . On the eve of the battle of Badar, the Prophet Muḥammad asked Bana Turmi, king of Gubur, to support him in battle against Haïbura, king of Kishra. The duplicitous Sarki Gobir Bana Turmi divided his men into two groups of warriors, and put one at the service of each of the warring parties, to ensure that, no matter what the outcome should be, the victor would treat him generously. On winning the battle, the Prophet Muḥammad was astonished to see a group of Gobirawa, who ought to have been his allies, flee with the vanquished enemy. Thus he discovered the ploy of Sarkin Gobir Bana Turmi.

The Prophet then cursed them, saying that henceforth they would suffer for ever more from internal division, and yet they would never be exterminated in war. His scheme confounded, Sarkin Gobir Bana Turmi travelled westward with his people until he came to the Bilma salt mines, where he died. Bashira, his son, succeeded him, and was in turn succeeded by his son Dala. Dala emigrated with his people to Abzin, was repulsed by the Abzinawa and went on to Sura Kal and then Birnin-Lallé.

A list of the kings of Gobir comprising 345 names begins with Canana, Lamarudu, Magajia Rékia, Abanwa Zibda (son of the king of Misra), Bawo na Turmi, Sana Kafu and Gobiru.

Is is claimed that Bana Turmi, who was none other than Bawo na Turmi, was a son of Bawo. This establishes the link with the completely different traditions of Daura, which tries to give an account of the foundation of the Hausa states.

Bayadjidda or the Daura traditions

The Girgam of Daura tells us:

The people came from Canaan and settled in Palestine. One of their number, called Najib the Canaanite, left Palestine with all his household and travelled to the west, to Libya, which is one of the provinces of Egypt, and he stayed there for several years. A man among them, called Abdul-Dar, one of the sons of Najib, left Libya to stay in the province of Tripoli. He remained there for a time, seeking the throne of Tripoli, but the people refused him. He left, therefore, and travelled to the south, to an oasis called Kusugu, where he settled. He had children and they were all daughters; their names were Bukaīnya, Gambo, Kafai, Waizamu, and Daura, the youngest. He begat them all before they came to Daura.

A man named Abu-Yazidu, son of Abdullahi, king of Baghdad, quarrelled with his father and with the people of the town. They were divided into forty groups. Then Abu-Yazidu, with twenty of the groups, went to Bornu and stayed there. The king of Bornu, however, saw that Abu-Yazidu was stronger than himself, and from a more powerful house; he took counsel, therefore, with his people. They advised him to give his daughter in marriage to Abu-Yazidu, and become his father-in-law. This he did, and his daughter, Magira, was married to Abu-Yazidu. Then the king of Bornu told Abu-Yazidu that he wanted to go to war and asked him to lend his horsemen and warriors to help the king against his enemies. Abu-Yazidu lent the king 3,000 horses and men together with seventeen princes. The king said, 'When we return from this war, I shall make them princes in my country.' They went to war and stayed away for six months.

Then the king of Bornu took counsel on how to kill Abu-Yazidu, but his wife, Magira, heard of this and warned her husband immediately; when he realized what had been done, with his horsemen and his princes taken from him, he understood that there was a plot to destroy him. He took refuge in the midst of his people and enjoined them to flee to the north during the night. They obeyed and left him; he arose with his wife and journeyed westwards. When they arrived at a place called Gabas-ta-Buram, his wife had a son; he left her there and went on with his concubine, who was also pregnant. They travelled on until they arrived, at night, at Daura. They knocked on the door of an old woman called Waīra. He asked her for water, but she replied that they might draw water only on Friday. He asked why, and she told him that there was a serpent in the well. He took the bucket she gave him, went to the well and put the bucket in the water. When the serpent heard the bucket, it raised its head from the well, making ready to kill, but Abu-Yazidu drew his sword and cut off its head. This head was like the head of a horse. He drew water and took the head of the serpent; this happened on the eve of Friday. In the morning the people gathered round the well, asking one another who had done this to the serpent, which had been called Sarki. They marvelled at the part that was outside the well, and at what remained inside. The news was brought to Queen Daura and she went to the well with all the princesses, and asked who had done the deed. Many people boasted, falsely, of having killed the serpent, but when she asked to see the serpent's head, all remained silent. Then the old woman at whose door Abu-Yazidu had knocked said

that a man had come to her house during the night with a beast that looked like a horse but was not a horse; he asked for a bucket and she had given one, then he had drawn water, watered his horse and given the old woman what remained; perhaps it was he who had killed the serpent. They questioned him, and he said that it was he who had killed the serpent, and he showed them its head. The queen said, 'I promised that whoever did that should have half of my town.' But Abu-Yazidu said that he simply wished to marry her, and she consented. He lived in her house with his pregnant concubine.

Whenever the people brought news to the queen, she told them to go to the house of Makas-Sarki (the killer of the serpent).

The concubine had a son whom she called Mukarbigari. Then the queen had a son, whom she called Bawo-Gari. Abu-Yazidu died and Bawo reigned on his throne.

Bawo had six sons. These were: Gazaura, who became king of Daura; Baguada, who became king of Kano, and was the son of the same mother; Gunguma, who became king of Zazzau (Zakzak); Duma, who became king of Gobir, and was a son of the same mother; Kumayau, who became king of Katsina; Samna-Kogi, who became king of Kano, and was a son of the same mother.

The same Daura traditions tell that Daurama, the same Queen Daura whom Abu-Yazidu married after his victory over the serpent Sarki, was the ninth sovereign of the land, and that she was preceded by Ina Gari, Gidir-Gidir, Uwailu, Katsinta, Uweramu, Yakainya, Yakanu and Kafara.

'History which is recounted' in 'history that was made'

Common elements in all these traditions of origins centre on four basic messages which they transmit or aim to transmit:

Migration which is presumed to have been from east to west or, more generally, from north or north-east to south or south-west.

A point of departure in the Near East, especially Yemen and north-east Africa, in particular Misra or Egypt and Habasha or Ethiopia.

A time of origin linked to the birth of Islam.

An Arabic/Islamic racial or ethnic origin, connected with Muḥammad or the caliphate in particular.

The various traditions concerning origins are distinguished one from another by the importance accorded to one or other kind of message. The chronicle of Dinga Kôré the Elder, ancestor of the Soninke, shows no reverence for Islam, and its religious aspect derives basically from traditional African culture, whereas the traditions of origin of the ethnic groups of the central valley of the Niger, and of the Za dynasty of the Songhay, related by the *ta'rīkhs al-Fattāsh* and *al-Sūdān* seem to be primarily concerned with finding Arab ancestors, even if this means drawing them from Arab-Islamic mythology (*Oûdj*, for example), or making them up entirely from local roots, which are

attached or inserted into real Arab-Islamic dynasties such as Tāras ben Hārūn and Djabir ben 'Abdallāh al-Anṣārī.

It would be interesting, therefore, to examine other kinds of text, especially the cosmological, cosmogonic and ritual texts of certain populations of the central valley of the Niger, to see to what extent the texts relating the myths and traditions of origins of those resilient traditional religions which suffered no crisis because of Islam—or Christianity—may be compared with oral or written historical traditions, and to what extent the texts can clarify these traditions, especially in their references to the names of persons and deities. The cosmogonic myths of the Songhay are related to the possession dances executed in the cult of the Holleys, and seem to present the most anthropocentric world view of the central valley of the Niger, in that they seem anxious to integrate the deities and the populations of the area. Because of this, we shall use them as a starting-point for the examination of these cross-references.

Traditions of origin in the cosmogonic myths

The genesis of the cosmogony of the Songhay who dwelt along the Great River[15]

Songhay cosmogony distinguishes several families of mythical or ancestral divinities; there are the Ziin pre-human divinities, mistresses of land and waters, anthropomorphic divinities who watch over nature such as the Holley, and apotheosized ancestors, such as Faran Maka Boté, ancestor of the Sorko fishermen.

The Holley 'spirits' form the basic structure of the Songhay religion and possession cult, and they may be subdivided into several mythological groups which correspond to various peoples:

The Tooru, spirits of river and sky, are the chief deities, mythical ancestors who ensured the Songhay settlement and domination of the central valley of the Niger.

The Ganji-Kwarey, 'white spirits', spirits of the Tuareg or of other nomads.

The Ganji-Bi, 'black spirits', 'Voltaic' spirits, are captives and yet are 'masters of the earth'.

The Hausa-Ganji, 'Hausa spirits'.

The Hargey, 'cold spirits', evil sorcerers.

The Atakurma, 'dwarf spirits' of the bush, who probably represent the first inhabitants.

The Hauka, 'spirits of strength', who represent the irruption of colonization and European civilization.

The great family of the Holley is, in itself, a constituent of the mythological peopling, with:

The Songhay represented by the Tooru.
The Tuareg and later the Arabs who brought Islam, represented by the Ganji-Kwarey.
The Gurma and the Mosi represented by the Ganji-Bi.
The Hausa represented by the Hausa-Ganji.
The troglodyte populations as a whole represented by the Atakurma.
Earlier riverside peoples as a whole represented by the 'cold spirits' or Hargey.
The Europeans and their civilization represented by the Hauka.
This classification should not make us lose sight of the facts that these deities frequented human beings and spoke with them from the outset, and that their anthropocentrism—their anthropomorphism, in fact—led at times to the disappearance of the line of demarcation between divine facts and human facts, making it difficult to understand this cosmogony or theogony—this ethnogenesis, to be precise—of Songhay deities. The following genealogies of the various spirits will help us follow the various phases of both ancestors and gods, through the journeys, encounters and struggles of groups or subdivisions in the myths of population movements (see Figs. 1–2).

Born of the primordial twins Hassa and Hini, Untaan and Mantaan, the ancestors of the Tooru, chief gods of the Songhay, and their children after them, lived first of all in Urumkuma or Rumkuma in the region of Foot or Foont near Misra (Egypt), a town 'where it was always night and never day', then migrated to the west and settled in the forest of Garyel or Galya near the village of Mogadyugu in the Zarmaganda, where they found the Ganji-Bi (comprising Gurma and Mosi descendants of Hangu Zangu Borzangu who had become 'the occupants and masters of the land' after having driven off the Atakurma people, the 'first occupants of the land'. In the course of the subsequent confrontations between the Ganji-Bi and the first Tooru (comprising Songhay and Kurumey or Kurumba), those who had newly arrived divided into chief Tooru and Ganji-Kwarey or 'white spirits' (Fig. 5), consisting of Tuareg and Muslims.

We therefore consider that it would be of interest to study the ethnic composition of the Ganji-Bi, who were originally Mosi, Gurma and other, indeterminate 'Voltaic peoples' (Fig. 4). These Ganji-Bi lived in Zarmaganda, where they associated with captive Fulani (Zataw), with Hausa (Guba-Siki), and with Bargancé, or Bariba (Fadimata Dongo Izé), all of whom they invited to join them. The mythology which shows how the Songhay represented the original human geography of the river valley prior to their own arrival speaks of a conglomeration of 'groups of Voltaic peoples' dominated by the Mosi-Gurma, or predominantly Mosi-Gurma, with minor elements of Fulani, Hausa and Bariba.

This was the state of affairs that faced the original Tooru when they arrived from Foont near Misra under the leadership of either the Songhay–

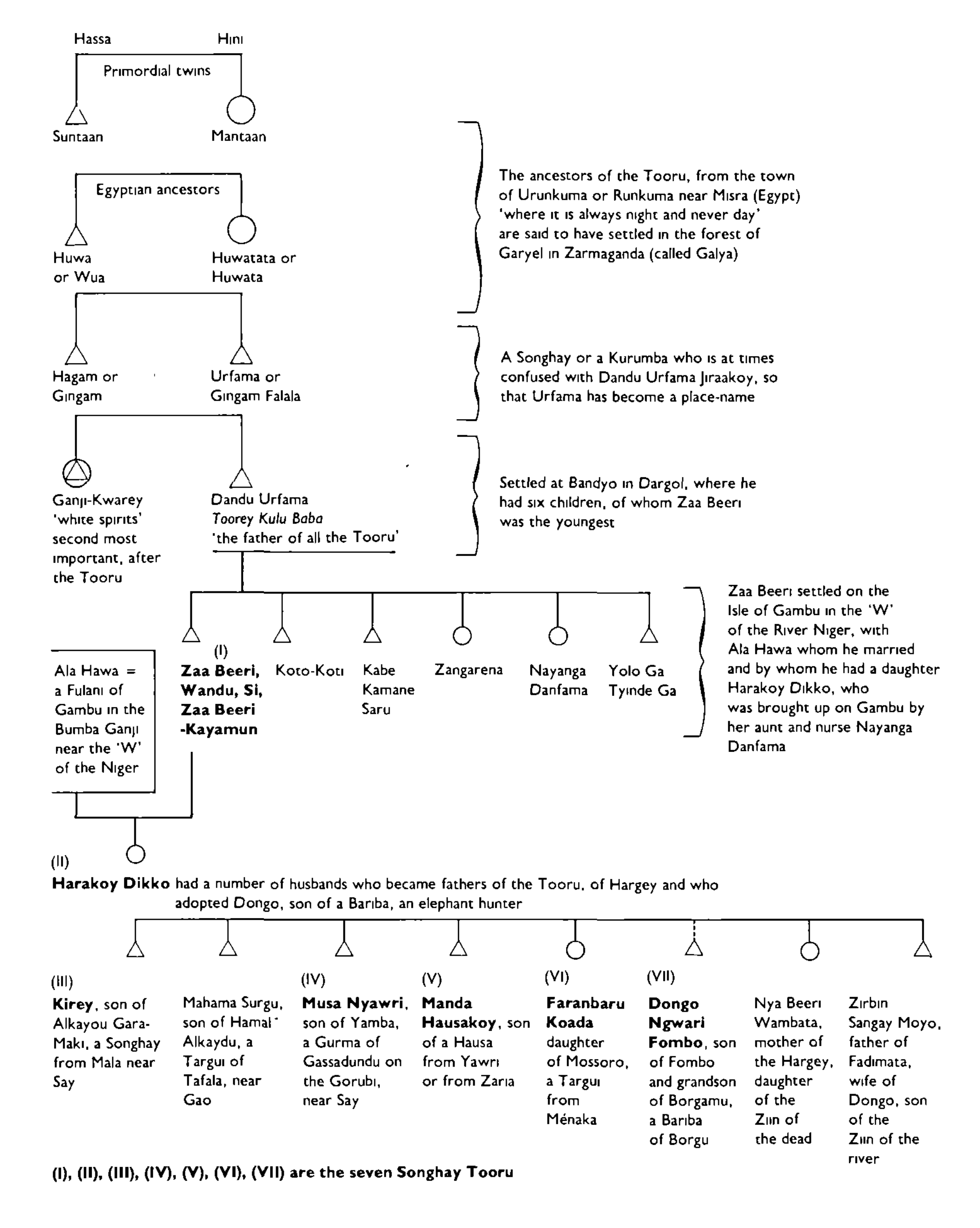


FIG. 1. Genealogy of the Songhay Tooru, chief spirits of Songhay cosmogony.

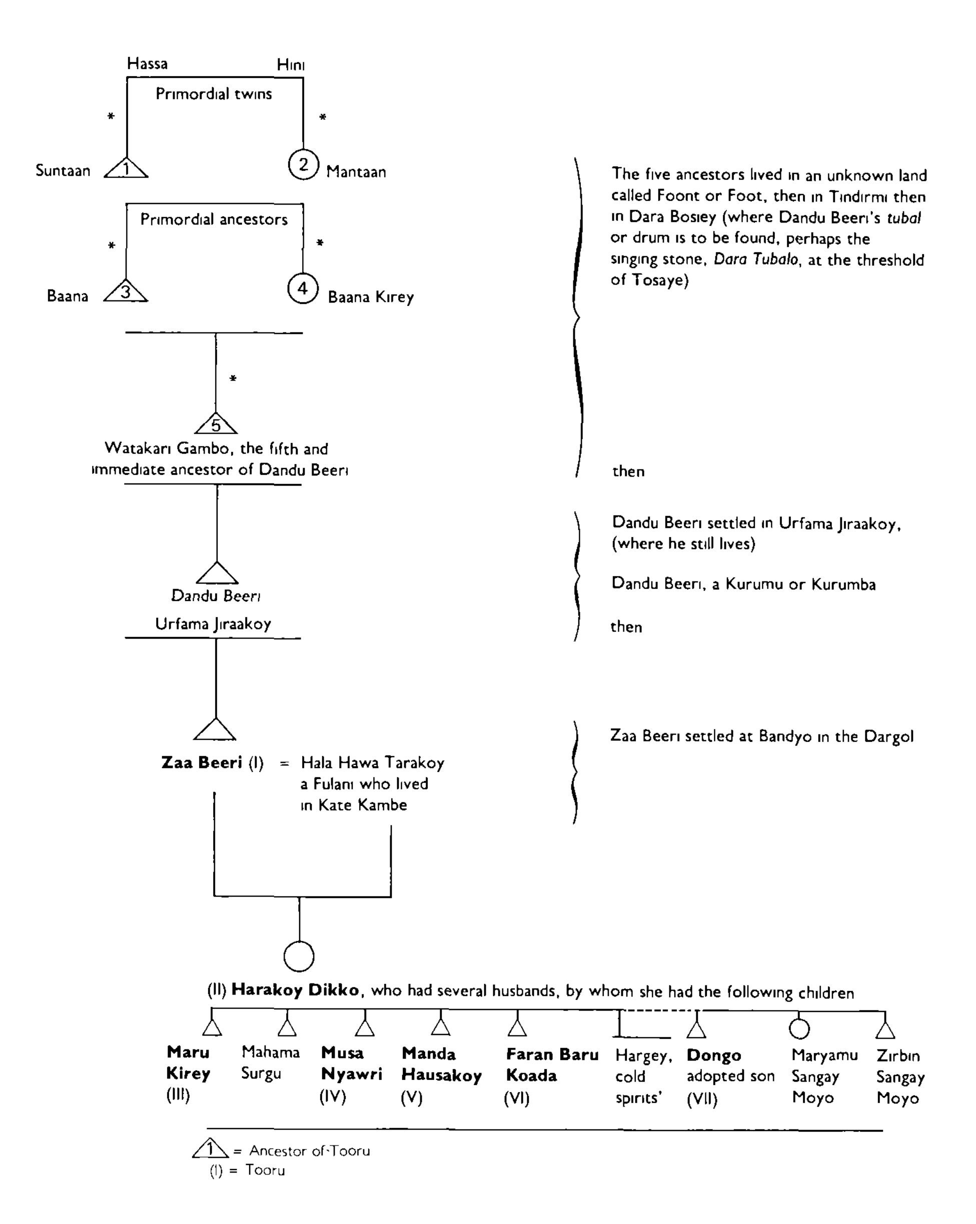


FIG. 2. Genealogy of the Songhay Tooru according to Dawda Sorko of Simiri in Zarmaganda.

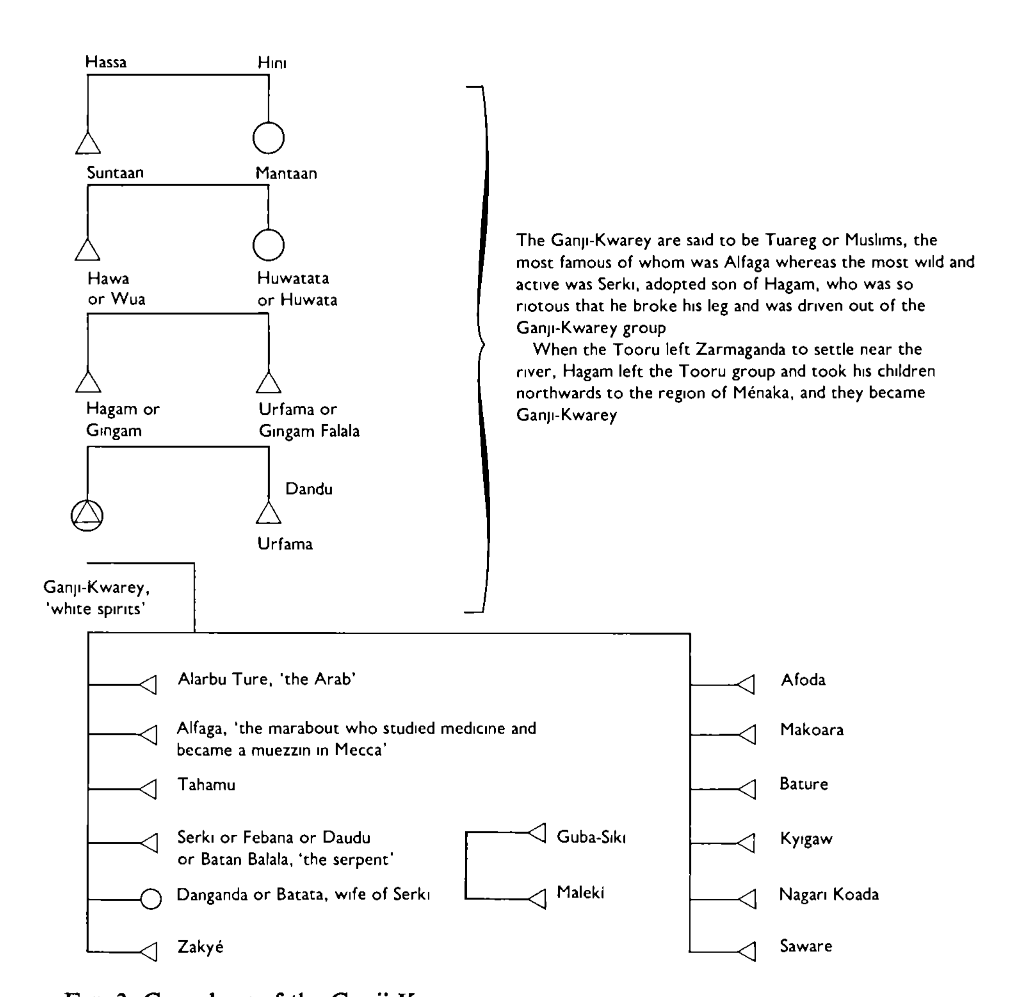


FIG. 3. Genealogy of the Ganji-Kwarey.

Kurumba Urfama alias Gingam Falala, or the Songhay–Kurumba Dandu Urfama Jiraakoy, whose group confronted the Banji-Bi of the Mossi-Gurma–Voltaic group in Zarmaganda. The outcome of the fierce and bitter struggle which ensued was that the Mosi-Gurma were routed and dispossessed by the Songhay, who took from them almost all of their former clients and allies, to form a new, restructured grouping, which divided in two at Zarmaganda: one went towards the river, led by either Gingam Falala (Urfama) or Dandu Urfama Jiraakoy; the other went north towards Menaka, under the leadership of Hagam Huwa alias Gingam Huwa. The former group became the chief Tooru deities and the latter became the Ganji-Kwarey.

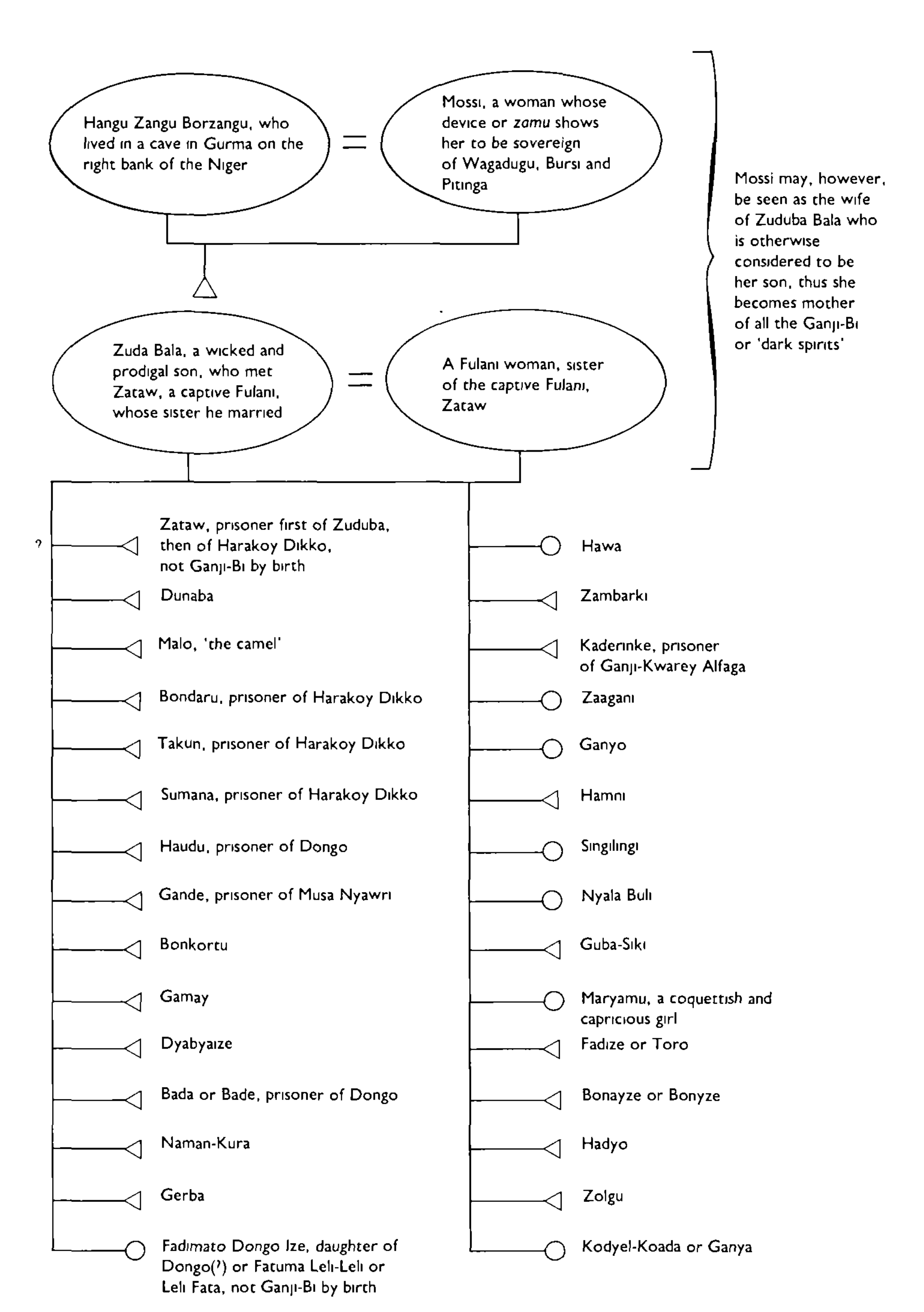


FIG. 4. Genealogy of the Ganji-Bi or 'dark spirits'.

Dandu Urfama Jiraakoy, son of either Gingam Falala or Watakari Gambo, settled at Bandyo in the Dargol, which takes its name from a little seasonal tributary, and there he had six children, of whom Zaa Beeri was the youngest.

If Dandu Beeri was the esteemed ancestor, elevated to the dignity of *Torrey Kulu Baba* 'father of all the Tooru', his son, Zaa Beeri, was so influential that his name dominated a major portion of Songhay history extending to the reign of Sunni ʿAlī Ber at the end of the sixteenth century of our era, for he was the deity who became the first of the chief Tooru and whose descendants ensured that Songhay gods reigned supreme on the river. Zaa Beeri left the Dargol, on the right bank of the Niger, and settled on the Isle of Gambu, on the 'W' of the river, in the land of his wife Hala Hawa, a Fulani woman of the 'Bumba Ganji' or 'Bumba Bush'. She bore him a daughter of remarkable beauty, Harakoy Dikko, whose marital tribulations were to enlarge the Holley group, especially the chief Tooru, and seal the alliance between men and gods.

From her first marriage, to Alkaydu Garamaki of Mala near Say, a Songhay-Kurumba of her own group, Harakoy Dikko had a son, Kirey, and thus the grandfather, Zaa Beeri, the mother, Harakoy Dikko, and her son, Kirey, became the first three chief Tooru deities. Harakoy Dikko divorced. She then married Hamal Alkaydu, a Targui from Tafala near Gao, by whom she had another son, Mahama Surgu, 'Mahama the Targui', who went north towards Menaka to join his maternal great-great-grandfather Hagan Huwa and the Ganji-Kwarey. Harakoy Dikko divorced again and then married Yamba, a Gurma of Gasadundu on the Gorubi near Say, by whom she had another son, Musa Nyawri, who became the fourth chief Tooru. And she divorced once more.

Harakoy Dikko then married a Hausa from Yawri or from Zaria, by whom she had yet another son, Manda Hausakoy, 'Manda, king of the Hausa', who became the fifth of the chief Tooru, and then she divorced again.

Harakoy Dikko remarried. Her husband this time was Mossoro, a Targui from Menaka, by whom she had a daughter (some say a son) Faran Baru Koada, who became the sixth of the chief Tooru. She divorced once again.

But Harakoy Dikko, who seemed to want children even more than husbands, adopted Ngwari Fombo or Dongo, eldest of the five children of Gombo or Fombo, a Bargancé or Bariba of Borgu, and a Bella woman called Lombo Kambenya, 'Lombo the Leper'. A Zarmaganda version from Daura Sorko of Simiri indicates that Fombo was a son of Bargamu, a Bargancé of Borgu.

Dongo or Ngwari Fombo was, in fact, co-opted by the Tooru children of Harakoy Dikko because of his strength and his imposing appearance; they enticed him by offering him the wife of one of them, the beautiful Fadimata Zirbin Sangay Moyo. Dongo and his four brothers Digi Fombo, Digyal Fombo, Magiri Fombo and Tuuro Fombo were all elephant hunters.

Harakoy Dikko then married the river spirit, the Ziin Sangay Moyo, son of Ibada, and by him she had a child, the Ziin Zirbin Sangay Moyo, and a daughter, Maryamu Sangay. Zirbin in his turn had a daughter, Fadimata Zirbin Sangay Moyo, who was married to Ngwari Fombo or Dongo, when he was co-opted. And Harakoy Dikko divorced once again.

This time she married the Ziin of the dead and by him had a daughter called Nya Beeri, 'the great mother' (Wambata or Walambelé), whose three successive marriages (to the Ziins Fitto and Zankulukoy and to Sadyara, 'the rainbow', 'the serpent of all the colours') were to bring forth the cold spirits, the Hargey, who were for the most part children of the last union (Fig. 7).

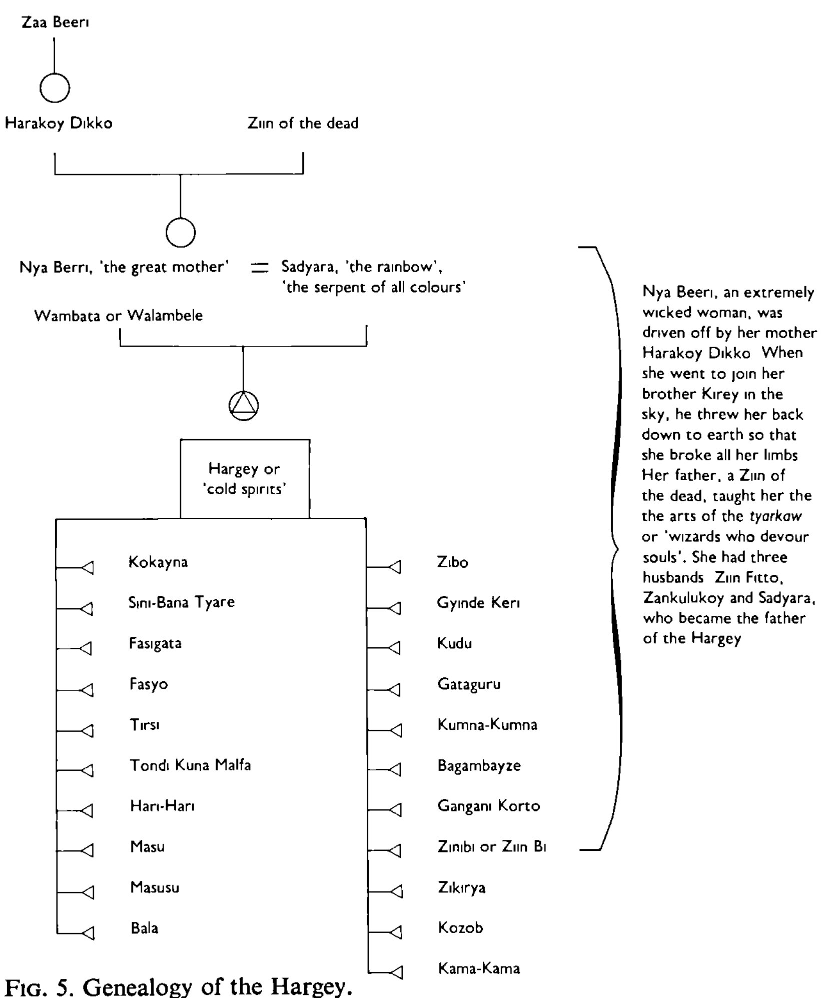


FIG. 5. Genealogy of the Hargey.

Once again Harakoy Dikko tired of her marriage, but she decided at last to rest in the river, and that was how the first history of the gods, in which ordinary mortals such as the Sorko figures came about.

The tables below set out the Tooru descendants of Harakoy Dikko, giving the attributes of each one.

Harakoy Dikko first of all had five successive husbands:

First	Second	Third	Fourth	Fifth
Alkaydu Garamaki, a Songhay of Mala, near Say	Hamal Alkaydu, a Targui of Tafala, near Gao	Yamba, a Gurma, of Gasadundu near Say in Gorubi	Hausa, of Zaria or Yawri	Mossoro, a Targui of Menaka

By these husbands Harakoy Dikko had five children, who were all brought up in Gambu, near Gurma:

First	Second	Third	Fourth	Fifth
Kirey, a Songhay of Mala, 'the red', 'spirit of lightning'	Mahama Surgu, a Targui of Tafala, 'Zangana', who became a Ganji-Kwarey	Musa Nyawri, a Gurma of Gorubi, 'spirit of the hunt'	Manda Hausakoy, a Hausa of Zaria or of Yauri, 'spirit of the forge'	Faran Baru Koada, a Targui of Menaka, sometimes man, sometimes woman

These five children were:

First	Second	Third	Fourth	Fifth
Wise man 'who knows all pathways of the sky'	Nomad shepherd	Hunter	Metalworker and smith	Sometimes hero, sometimes androgyne

After the adoption of Ngwari Fombo or Dongo, the seven main Tooru, chief deities of the Songhay, were therefore:

1. Zaa Beeri, the Songhay or Kurumba father of Harakoy Dikko.
2. Harakoy Dikko, daughter of a Fulani woman and Zaa Beeri.
3. Kirey, the Songhay son of Harakoy Dikko.
4. Musa Nyawri, the Gurma son of Harakoy Dikko.
5. Manda Hausakoy, the Hausa son of Harakoy Dikko.
6. Faran Baru Koada, the Targui daughter, sometimes called a son, of Harakoy Dikko.
7. Dongo, the adopted son of Harakoy Dikko, a Bariba whose mother was a Bella.

These first seven deities represent seven initial ethnic groups: (1) the Songhay; (2) the Kurumba or Kurumey; (3) the Fulani or Peul; (4) the Tuareg or Surgu; (5) the Gurma or Gurmance; (6) the Hausa; (7) the Bariba or Bargu or Bargancé.

Thus, after their victory over the Ganji-Bi in Zarmaganda, the ruling Songhay deities suffered some lasting reverses very shortly after settling on the river, which obliged them to come to terms with other groups who were already struggling for control of the River Niger, the famous 'Kāw-Kāw Nile' of the Arab historians and travellers. Jean Rouch summarizes perfectly the link between mythological history and the beginning of the history of the Songhay for

> thus had the Holey spread over the world: Holey from Egypt, Holey, masters of the ground, Holey from Hausa, Holey, consumers of souls were now separated. At that time, the Ziin were still all-powerful. And it was the rivalry between the Ziin of the river and the Tooru which gave rise to the first tale bringing a man, the Sorko, Faran Maka Boté, into this 'palaver' of deities.[16]

When the Tooru reached the river under the leadership of Dandu Urfama at Bandyo in the Dargol, Dandu Urfama's son, Zaa Beri, went south to the 'Bumba Gangi', the 'Bumba bush', in the present area of 'W' where Harakoy Dikko was born. Zaa Beri enlarged the group through the successive marriages of his daughter, Dikko. But the group of Sorko fishermen was already developing on the river and was divided at that time into four main families around Faran Maka Boté, Faata Ka Faran, Maïda Ka Faran and Zinkibaru, allied in varying degrees with the Ziin, the 'genies of the river', who were the real masters, 'crocodiles' or 'snakes' of the Great River.

Two individuals were to emerge from the Sorko group and engage in a duel to the death, episodes of which are still to be found in popular traditions from Lake Debo in Mali to Yawri in Nigeria.

Zinkibaru used the magic spells which he had acquired through his Ziin birth to subjugate the Tooru, bewitching them with the sound of his drum, *don don* and his fiddle, *godye*. Faran Maka Boté, who was a Ziin through his mother, Maka,[17] and was then settled at Gao, soon entered into conflict with Ziin Ki Baru for the supremacy of his subgroup on the River Niger. After winning this battle, he freed the Tooru, but kept the musical instruments by means of which Zinkibaru had held them spellbound. He then set off once more to rejoin his mother at Bumba. But we will now examine in greater detail this adventure of the gods in which they requested the intervention of men.

The first story about the river brings into conflict the ruling Tooru and the 'genies of the river', particularly their chief, Sangay Moyo. After her seventh marriage to the Ziin of the dead, Harakoy Dikko wished to rest in the river but her ex-husband, the Ziin of the river, Sangay Moyo, opposed this. War then broke out between the Tooru and the Ziin, and practically all the Tooru sons of Harakoy Dikko came and were defeated, with the exception of

Musa Nyawri who was with his father in Gurma and who was informed of the hostilities by the crowned crane sent by Harakoy Dikko.

Musa Nyawri came with the magic powders given to him by his grandfather and vanquished the 'Ziin from above' and the 'Ziin from below', enabling his mother to return to the river. But, before she did so, she wanted to see her son Musa Nyawri praised for his bravery and his victory and she therefore made an appeal to men, particularly the Sorko fishermen.

This was the first appearance of men. The Sorko came and the most outstanding panegyric was delivered by Zinkibaru, to whom Harakoy Dikko gave an axe as a reward.

This first artistic victory made Zinkibaru a 'master of words' as he became rapidly aware of the Tooru's sensitivity to words and accompanied himself on a guitar.

One day, Faran Maka Boté found Zinkibaru on an island at the junction of seven rivers. Zinkibaru was playing his guitar and some Ziin of the river were playing the drum *don don* and the violin *godye*. The Tooru were dancing. Faran Maka Boté undertook to free the Tooru from the musical spell of Zinkibaru and his Ziin allies. This was the first great human adventure in the history of the Songhay deities, an adventure which would establish the alliance of gods and men.

Faran Maka Boté or Nabo Kantabo was the son of Nassili Bité, a poor Sorko fisherman who caught fish with his hands and who stopped at Karey Kopto to build a house out of an anthill mound in which he found, when digging, a woman genie, Maka or Mha, who held in her hand an iron rod ringed with copper, the *guru gobu*, which had extraordinary magic properties. The mother of Maka, Gate, was also a woman genie who lived at Gurzanke in the Manda or Mande.

As his father was a fisherman and his mother a Ziin, Faran Maka Boté learned fishing and the magic arts. His mother gave him his first harpoon. *zogu*, by changing into iron the evil Ziin Zirbin Sangay Moyo (the son of Harakoy Dikko and her last husband, the river Ziin, Sangay Moyo) who had killed many Sorko fishermen. In addition to this harpoon which was called *zirbin*, Maka gave her son a second one, the female *zogu*, *babingay*.

Faran Maka Boté was then ready for the great adventures for which he was destined. First of all, he defeated Zinkibaru (the Ziin?) who had subjugated the Tooru at Gambu. For this purpose, he left Karey Kopto and settled at Gao. The episodes in this fight led Faran Maka and Zinkibaru to Rumkuma, Duskongye, the River Gorubi and then to the depths of Gurma at Gasadundu, from which Faran Maka emerged victorious and took possession of the *hargyi*, a trident with three barbed points belonging to Zinkibaru, and the musical instruments, the guitar, the *don don* (drum) and the *godye* (violin), with which Zinkibaru had subjugated the Tooru.

He then freed the Tooru whom he led back to the River Niger and returned to Gao. The power of Faran Maka thus increased considerably as he was now able to make the Tooru dance by means of the musical instruments whose power over the Tooru had been complete since the instruments were used by Zinkibaru, and because he now possessed the harpoons, *zirbin* and *babingay*, and the trident, *hargyi*. However, Faran Maka does not seem to have misused his power of musical spells over the Tooru. They settled near Gao, at Dara (gorge of Tosaye) and at Markendé (present-day Barkayna, near Tosaye). Faran Maka set off again to rejoin his mother at Bamba Tebi (near Bamba). A coalition seems to have formed around the defeated Zinkibaru, for the Ganji-Bi, after leaving the forest of Garyel and crossing the river to settle in Gurma, formed an alliance with the Kurumey to attack the Tooru.

The Kurumey began to steal the soul of the millet belonging to the Tooru. The Tooru moved away, following the river, pursued by the Ganji-Bi as far as Runkuma, 'the town where there is no day', where they nevertheless managed to see their path by using a magic mirror. But Faran Baru Koada took the mirror and gave it to the Ganji-Bi too, and thus determined the resistance of the Tooru by drowning two times fifty Ganji-Bi. Open war then broke out in earnest. Harakoy complained of the lack of fighting spirit among the Tooru to Dandu Urfama and old Hagam, who then gathered together all their Tooru and Ganji-Kwarey children. The Ganji-Bi then entered the river while the Hausa-Ganji, who were not involved, returned to Hausa. The war lasted one year.

Exasperated by the fact that the Ganji-Bi often hid in the river, thus prolonging the conflict, the Tooru children of Harakoy Dikko, who were called Musa, Dongo, Kirey and Hausa Koy, decided to have done with them once and for all by attacking their village from the sky. One night, during a tornado, Manda Hausakoy the blacksmith, made lightning to herald the storm with the sparks from his flint. Kirey, 'who knew all the paths of heaven', lit up the earth with his long lance, Lolo, in a great and lasting flash, Dongo thundered to create fear and threw his axe of lightning which Manda Hausakoy had made for him, while Musa Nyawri then descended to kill, with the arrows fired from his 'magic iron bow', those Ganji-Bi who had not been struck by the lightning.

Then, all the Tooru joined the combat: the old Dandu Urfama who wanted 'to kill everybody'; Turo, the son of Zangina Surgu, who only killed 47 (because his mother was not a Tooru); Dongo, who had already killed 50 and who killed another 50 and Faran Baru who had already killed 100 since the beginning of the war at Rumkuma.

In the fury of the pursuit, Musa Nyawri was made a prisoner in Gurma but was set free by Kirey.

Thus, the Ganji-Bi were defeated and many of them were captured and

distributed by the patriarch, Dandu Urfama, between the Tooru and the Ganji-Kwarey.

This victory gave the Tooru supremacy over the other Holley. All the Tooru then returned to Dara but Dongo went among the Ganji-Kwarey and when his brothers Kirey and Manda Hausakoy went to look for him, he asked Kirey to make him a black *boubou* so that he could give up his Bella leather clothes, and he asked Manda Hausakoy to make him an axe with a small bell as a defensive weapon.

From that time on, Kirey 'who possessed the flashing lightning which precedes the thunder' and Dongo 'who made thunder and cast lightning', possessed fearsome weapons which they used foolishly, playing in the sky above the village of Markende, occupied by the Sorko of Faran Maka Boté who, as we know, liberated the Tooru from the yoke of Zinkibaru. The thunderbolt fell on the village, which burned down. Then, Dongo, who was ashamed, wanted to repair the damage which he had caused and confided in his mother, Harakoy Dikko, who went with him to see her grandfather, Dandu Urfama. Dandu then gave Dongo a large, hemispherical clay vessel, the *hampi.* But as a man was needed who could flatter Dongo to calm his anger, Harakoy Dikko advised calling on the Sorko, Faran Maka Boté, and Dandu Urfama thus taught the *zamu*, the watchword of the Tooru, to Faran Maka Boté. The Tooru gathered around the ritual vessel, the *hampi*, which Faran Maka filled with water. Dongo then plunged his head into it, took some water into his mouth and spat it out on the thunder-struck corpses which returned to life.

This was the first Yenendi, 'the refreshment', 'the appeasement', 'the Markendé *yéné*', the '*yéné* of Markendé', the first initiation during which the Sorko, Faran Maka Boté, learned to summon the Tooru around the ritual vessel, *hampi*, to cure the thunder-struck and to recite the watchword of the Tooru, their *zamu*; the call of the Tooru, their *keeyen*, the first initiation which sealed the alliance between the Sorko and the Tooru. It was also the one and only ceremony in which the Tooru took part in a physical form visible to men, for they later acquired horses or *bari*, that is to say 'men-horses' on which they appeared in reply to the call of Faran Maka Boté and on which they appear to this day when responding to the call of his descendants during dances in a state of possession.

Mythical geography of the Great River and Songhay ethnogenesis

The whole story of the Songhay deities on the river seems to unfold or to repeat itself between the Tosay Gorge upstream and the 'W' downstream, which correspond almost exactly to the points where Wādī Tilemsi and Wādī Azawak or Dallol Bosso meet the Great River.

The earthly adventures that preceded it occurred or recurred between these two dried-up wādīs which seem to have determined the route of migrations.

The earliest hostilities between the Tooru, from Urumkuma near Misra, who were Kurumba (and Songhay?), and the Ganji-Bi, who were Mosi (and Gurma?), natives of Zarmaganda, were struggles for possession of the land by agricultural deities. The Ganji-Bi themselves had driven off the Atakurma, a small group that dispersed into the bush. Whereas the Ganji-Bi seem to have had contact with the Fulani (through Zataw) and perhaps with the Hausa (through Guba-Siki), the Tooru seem to have been mainly Kurumba when they arrived in Zarmaganda (even Dandu Urfama, the ancestor 'father of all the ruling Tooru' is considered to have been a Kurumu), so that the Tooru did not previously include any foreign elements.

However, by the time that Dandu Urfama had settled at Bandyo in the Dargol—in the interior, as befits the leader of a farming people—the Tooru group must have incorporated or intermarried with elements of the Ganji-Bi, Mosi (Gurma?) even though the myth does not tell us who was the mother of the six children of Dandu Urfama, and makes no reference either to any conflict with new arrivals, or to any agreement at such a time. Nevertheless, we should not be deceived. We are dealing with a complex mythological adventure which, right from its faltering beginnings, continually goes back on itself like a three-dimensional force whose trinomials of space/time/duration interchange and which, in spite of everything, follows a certain historical line and a certain dialectical evolution of its own, which shows through the accretions and the apparently useless repetitions, which are in fact not repetitions but adaptations to new physical or socio-cultural contexts.

An alliance or a conflict between two groups of deities and two groups of people may be linked at any moment to any distant ancestor or even to the primordial ancestor, in order to increase the solemnity of an oath or *alkawlu* that is sworn, to increase the stature of a person or an event, or to emphasize the force and the tragic intensity of a particular struggle.

While Dandu Urfama settled in the interior of Dargol beside the small seasonal tributary, the Great River itself saw the growth of the population of Ziin of the river or spirits of the river, Ziin of the dead or spirits of the dead.

The myth does not tell us how Dandu Urfama crossed the river, but it must have been with the permission of the Ziin of the river. The myth does not tell us to which ethnic group these Ziin belonged, although it does tell us that apart from the Ziin of the river, who were mainly *kara* or 'crocodiles' like Sangay Moyo, there were the Ziin of the dead, mainly *gondi* or 'serpents' such as Sadyara, 'the rainbow', and also the female Ziin, of extraordinary powers, such as Maka, mother of Faran Maka Boté, who was in possession of the

secrets of fishing and fishing equipment. These female Ziin had already begun to intermarry with the little human Sorko fishermen such as Nassili Boté, father of Faran Make Boté, or the father of Zinkibaru. The Ziin seem to have been a group of families living on the river and on both of its banks with 'guardians of the river' and 'guardians of the dead', whose main activities seem to have been hunting and fishing, if we may judge from the powers that the female Ziin passed on to their human children, the Sorko Zinkibaru and Faran Make Boté, who were also, among other things, great hunters of elephants. In spite of their power, few names of the Ziin emerge from the myth other than those of Sangay Moyo, Ziin of the river, and the female Ziin, Gate, and her daughter Maka; this is not to mention the special family of the Hargey.

When Zaa Beeri, son of Dandu Urfama, settled on the Isle of Gambu downstream in the 'W', with the Fulani woman Hala Hawa, the first named foreign deity to join the Tooru, it was perhaps with the consent of the Ziin, and it was also in the wildest and most inaccessible part of the central valley of the Niger, judging from its appearance today, at the edge of the W Park, the inter-regional nature reserve.

It is possible that the 'W' area was at the edge of the part of the river that was controlled by the Ziin. Whether the 'W' was a place of exile, a place of refuge or a place where he settled voluntarily, it was there that Zaa Beeri settled with his Fulani wife, Hala Hawa, the first deity with a clearly stated name and tribe to join with the Tooru. It was from this impenetrable and naturally protected zone that Harakoy Dikko, their first-born, began to make her political matches which so enlarged the Tooru group, winning for Zaa Beeri the title of Zaa the Great.

The characters in the myth who had become anonymous along with the Ziin then took ethnonyms and the ruling Tooru were in fact formed from an alliance of inter-group ethnic deities, which terminated with the '*yéné* of Markendé' and put an end to the earthly saga of the Holley on the river.

The father of Tooru Kirey was a Songhay from Mala, near Say; the father of Tooru Musa Nyawri was a Gurmance from Gassadundu on the Gorunbi; the father of Tooru Manda Hausakoy was a Hausa from Yawri or from Zaria; the father of Tooru Faran Baru Koada was a Tuareg from Menaka; and the father of Tooru Dongo, the adopted child, was a Bargancé from Borgu; this diversity of the fathers of Tooru, and the fact that Zaa Beeri himself, the first of the Tooru, was held to have been a Kurumu, as well as the fact that Harakoy Dikko herself had a Fulani mother, meant that the Tooru represented great ethnic diversity, embracing Kurumba (Kurumu), Fulani, Songhay, Gurma (Gurmance), Tuareg, Hausa and Bariba (Bargancé), and excluding the Ganji-Bi, the Ziin and the Hargey. The ancestor of the Ganji-Bi, Hangu Zangu Borzangu, father of Suduba Bala, who is described as the

husband or the stepfather of Mosi, had a name which sounds fully Kurumba, or rather Kurumfe,[18] like a number of his descendants such as Zuduba Bala himself, and perhaps Naman-Kura (this in spite of the link that can be made with the Hausa). If the Ganji-Bi had a Kurumba paternal ancestor and a Mosi maternal lineage, then we would have a simple explanation of why the myth does not dwell very much on the first conflict in Zarmaganda between the Ganji-Bi and the Tooru when the Tooru arrived, while it says far more about the victory of Faran Maka Boté over Zinkibaru, during which the Kurumba broke with the Tooru, joined forces with the Ganji-Bi and 'stole the soul of the millet' of the Tooru, thus acting in accordance with a golden rule of the myth, by which the Tooru descendants of Harakoy Dikko enlarged the house of their mother matrilineally, or at least by settling in their mother's territory.

The first Songhay deity who is named is Alkaydu Garamaki, father of Tooru Kirey, since prior to the arrival in Zarmaganda or in Bandyo, ancestors such as Dandu Urfama or Dandu Beeri or Zaa Beeri are said to have been Kirumu or Kurumey or Kurumba.

The names of the Ziin, also, are missing from this ethnic panorama, although the myth does tell us of the marriage of Harakoy Dikko to the Ziin of the river, Sangay Moyo, by whom she had two children, Zirbin Sangay Moyo and Maryamu Sangay Moyo, and of Harakoy Dikko's marriage to the Ziin of the dead, by whom she had Nya Beeri, 'the great mother' of the Hargey. One single reference in the name of a Hargey, Bagambayze, makes us think of Dagomba and thus of the Dagomba people.

However, among the names of the demigod children of the female Ziin who married the Sorko fishermen, Zinkibaru seems to indicate the name of an ethnic group called the Ci or Ki, which lived in Zarmaganda before the Songhay and the Zarma.

In the Songhay language, the name Zinkibaru can be split into 'Ziin Ki Baru', where the word '*ziin*' means 'genie' and where '*baru*' means 'great', in the same sense as *beeri*. Thus Zinkibaru would mean 'the great Ki Ziin'. Zinkibaru would thus be more 'Ziin' than 'Sorko', which would explain his alliance with the Ziin at the time when the Tooru were captivated by the spell of music and word, as well as the alliance with the Ganji-Bi and the Ziin in the great war that ended the saga of the Tooru and set the seal on their lordship over the central valley of the Niger.

A chart comparing the cosmogonic saga of the Tooru with information from oral and written sources on the beginnings of the Songhay kingdom of Kukiya and the Songhay Empire would show the oppositions that are set out in the following paragraphs.

On one hand there are the Songhay/Kurumba Tooru from Urunkuma in Foont near Misra, and on the other hand, Songhay descendants of Songhay-

ben-Tāras, son of Tāras ben Hārūn, king of Yemen, according to the *Ta'rīkh al-fattāsh*.

On one side there is Dandu Urfama, *Toorey Kulu Baba*, 'father of all the Tooru', who left Zarmaganda and settled at Bandyo in Dargol. His son, Zaa Beeri, who was also known as Si, Maley, Wandu or Si Kayamun,[19] went to the Isle of Gambu in the river, whence his daughter, Harakoy Dikko, secured the supremacy of her group with her numerous marriages into neighbouring groups. On the other side, there is Djabir Ben Abdallāh al-Anṣārī, from Medina, one of whose matrilinear descendants became king of the Songhay (according to the *Ta'rīkh al-fattāsh*), then a Diāber-El-Yemen *(Ta'rīkh al-fattāsh)* or Zā-al-Ayaman *(Ta'rīkh al-Sūdān)*, who came from Yemen and killed the fish-god of Kukiya and became the first king of Songhay of the first dynasty of the Za, or Dia or Dioua.

On one side are the Tooru, with many 'matrilocal' alliances between ethnic groups, centred on Harakoy Dikko, 'spirit of the water' and her father, the patriarch Zaa Beeri Kayamun, whose ancestors Suntaan and Mantaan were said to have come from Urumkuma in Foont, near Misra (Egypt). On the other side, there is a matrilinear descendant of Djabir from Medina, contemporary of the Prophet Muḥammad. This descendant killed the fish-god and became king of the land. There is also Diāber-El-Yemen, from Yemen, who married Weiza Koukya, queen of Kukiya, and became king of the Songhay. Alternatively, there is a man 'of enormous proportions', remarkable 'for both the size and the perfection of his stature', from Yemen, 'who held in his hand a stick with an iron pommel', and who became king of the town of Gao, on the right bank (the Gurma side); or again there is Zā-al-Ayaman, from Yemen, who killed the fish-god of Kukiya with a harpoon and became king.

On one side is Tooru Musa Nyawri, who vanquished the Ziin of the river to allow his mother Harakoy Dikko to go and rest in the river; there is the Sorko, Faran Maka Boté, who defeated Zinkibaru, 'the great Ki Ziin', to rescue the Tooru; there are also Tooru Kirey, 'spirit of lightning', who knew all the paths of the sky, Musa Nyawri, 'spirit of the hunt', who had a 'magic bow of metal', Manda Hausakoy, 'spirit of the forge', 'who made hatchets of thunderbolts', and Dongo, 'master of the sky' and 'spirit of thunder', who hurled the thunderbolt hatchets; all these were sons of Harakoy Dikko, and they pursued and defeated the alliance of the Ganji-Bi, the Ziin and the Kurumba, who used hit-and-run tactics and hid in the river and on the far bank; there was also a descendant of Djabir Ben 'Abdallāh al-Anṣārī, and Zā-al-Ayaman, who killed the fish-god of the Kukiya and thus delivered the town, and finally, there was a son of Diāber-El-Yemen who fought 'the nomadic Arabs of the nearby mountains single-handed, since iron could not penetrate his body'.

On one hand are the Ziin of the river, who were *kara* or 'crocodiles'—masters of the river such as the Ziin Ibada, his son the Ziin Sangay Moyo, and his grandson, the Ziin Zirbin Sangay Mayo; there are also the Ziin who became Hargey, such as Sadyara, 'the rainbow', who was a 'serpent of all colours'. On the other hand there is a fish-god who was adored by 'the people of Gao, [who] had no sovereign other than the great fish'.

On one side there is Maka, mother of the Sorko Faran Maka Boté, who had *goru gobu*, a rod of iron ringed in copper; there is the Ziin Zirbin Sangay Moyo, who was a kara or 'crocodile' that frightened the fish and killed many of the Sorko fishermen; he was transformed by Maka into the first *zogu* or harpoon. Maka gave the harpoon to her son Faran Maka Boté; it was called zirbin. A female *zogu*, *babingay*, was then made for the battle against Zinkibaru. On the other side, there is a female descendant of Djabir Ben ʿAbdallah-al-Anṣāri (a man from Medina, and a companion of the Prophet Muḥammad) who was captured and married by Christian metalsmiths when she went to look for her nephew who had run away. Her son found the runaway cousin in Gao and made him a *damé* or 'harpoon' so that he might kill the fish-god and become king. There is also Diāber-El-Yemen of the *Ta'rīkh al-fattāsh*, who 'had in his hand a stick with an iron pommel', and there is Zā-al-Ayaman of the *Ta'rīkh al-Sūdān*, who 'threw a harpoon' at the fish-god of Kukiya and 'killed it', and became king.

On one side there is Tooru Musa Nyawri, 'spirit of the hunt', and there is Tooru Dongo, whose brothers Digi Fombo, Digyal Fombo, Magiri Fombo and Tooro Fombo, descendants of Bargamu, a Bariba from Borgu, were *gaw*, 'hunters' of elephants. There are the Ganji-Bi, defeated and subjected by the Tooru, and the Ziin, former masters of the river, who were defeated by the Tooru and their Sorko allies: the Ziin Zirbin Sangay Moyo, who was changed into a harpoon by *zogu*, and Ziin Zinkibaru (although he is presented as a Sorko). There are also the Sorko, Faran, expert fishermen and masters of the cult. On the other side, there are *gaw*, hunters, and *gabibi* or *gabi*, or 'men of dark complexion', settled farmers. There are also the Do, former masters of the river who had become masters of the river reaches; and the Sorko fishermen 'Hari Sorko', and the Sorko who were expert in the cult of the Holley, especially of the Tooru Dongo Sorko.

On one side there is Dandu Urfama Jirakoy, *Toorey Kulu Baba*, 'father of all the Tooru', who came to live at Bandyo in Dargol on the right bank, the 'Gurma side'; there is Zaa Beeri, his son, who went to the Isle of Gambu in the 'W' of the river. On the other side are the Songhay kings of the Za dynasties, who reigned in 'Gao, on the Gurma side of the river', or in 'Kukiya' or 'Gungiya', which means 'isle'.

On one side are the Tooru, children of Harakoy Dikko, who sought to co-opt Ngwari Fombo or Dongo because of the strength and physique of this

elephant hunter, enticing him with a woman, the beautiful Fadimata Zirbin Sangay Moyo. On the other side is Diāber-El-Yemen of the *Ta'rīkh al-fattāsh*, a man of 'gigantic proportions', to whom the inhabitants of Gao gave a woman, 'as much because of his imposing physique as for the perfection of his limbs', and whose son later received the same tribute and eventually became king of Gao.

On one side is Harakoy Dikko, 'spirit of the water', mother of the ruling Tooru-Kirey, Musa, Manda Hausakoy and Faranbaru Koada, who lived at first on the Isle of Gambu and who, through her numerous marriages, enlarged the group led by her father, Zaa Beeri. On the other side is Diāber-El-Yemen, from Yemen, who married Oueiza-Koukiya, which means 'the Za wife of Koukya'. They lived on the Isle of Kukiya and the children of this marriage were 'the beginnings of the Diāber Banda' or Zaber Banda, who are the Zaa Beeri Banda, descendants of Zabar or Zaa Beeri.

On one side there is Zaa Beeri or Maley,[20] the first of the ruling Tooru, who compelled his daughter Harakoy Dikko to 'marry many times' to enlarge his group. On the other side is Zabarkaan, ancestor of the Zarma. A companion of the Prophet Muḥammad, he was so anxious and impatient to have his daughter married that he did not even wish to let her complete the three months of celibacy required of Muslims between divorce and remarriage. There is also Zabarkaan, one of whose descendants was called Mali Bero or Mali Kamandugsa.

The preceding paragraphs convey some idea of the parallel between the cosmogonic saga of the Songhay and other historical traditions, written or oral, concerning the origins of the Songhay people and kingdom. Although we could adduce other details as points of comparison, the evidence we have already cited suffices to establish our case. We may conclude that all the ideas in the second category are contained in the first; that, without a doubt, the cosmogonic saga is most typically rooted in the physical, human and cultural environment; and that it provides a most veracious account in spite of elisions and interpolations made in the course of time. Nevertheless, we do not maintain that the contents of the saga should be read as a finished and immutable overview of history.

Comparisons can be made between Songhay tradition and the historical tradition of neighbouring peoples, such as the Hausa. One tradition tells of Harakoy Dikko, who married several times to bring forth the Tooru; the other has Daurama, queen of Daura, who married the killer of the god-serpent or god-horse of Daura, and gave birth to Bawo-Gari, whose many children were the first sovereigns of the Hausa states. In one tradition there is Serki, adopted child of Hagam. He became Ganji-Kwarey, and was also known as Febana or Daudu or Batan Balala. He was said to have been a 'serpent' at times, and was so troublesome that he was driven out of the group. In the

other tradition is Sarki, a serpent-god or horse-god, or a serpent-god with the head of a horse, who lived in Daura, terrorizing the townspeople. He was killed by Bayadjidda, son of the king of Baghdad.

There is no need to discuss the Hausa-Ganji, since the list of their names tells us nothing new about the nature of the links between the Hausa and the Songhay. On the other hand, it is well to consider Manda Hausakoy, the ruling Tooru, Hausa child of Harakoy Dikko, and the only metalworker and craftsman smith among the Tooru. His name, Manda, is reminiscent of Mande, and the title *Hausakoy* means 'chief of the Hausa', where 'Hausa' might refer either to the 'land of the Hausa' or the 'Hausa side, direction, or bank', which would be the north or north-east, or left, bank of the river, as opposed to the south or south-west, or right, bank—the Gurma side of the river.

The term 'Manda', 'Mande' or 'Malle' is used repeatedly in the Zarma and Kurumba historical traditions[21] as a departure point for some original migration. Using in most cases the terms 'Manda' and 'Malle', the Zarma traditions place it in the west, while certain Kurumba traditions, mainly using the word 'Mande', situate it in the east, near the central valley of the Niger, in the region which is now known as Niamey.

We know that Boubou Hama in several of his works, and also Bocar Cisse,[22] point to similarities between Argungu and Weizagungu, a town on the Gulbin-Kabi, 'the River Kabi', considered to have been a stage in settlement by the Songhay, after Aïr or Abzin and Katuka in the region of Daura, where Oueiza Koukya of the *Ta'rīkh al-fattāsh* married Diāber-El-Yemen and whence the dissident Songhay princes left to found Argungu. These two authors therefore draw a parallel between 'Argungu', which can be translated into the Songhay language as 'island of the man' or 'island of men', or even 'male island', and 'Weïzagungu' or 'Weizakukiya', which they translate as 'island of women', or 'female island', which would normally have been 'Weigungu' or 'Gunguwei' in Songhay, omitting the middle element *'za'*, which could mean 'to take', or it might simply be 'Za', a proper name, like that of the first Songhay dynasty. Thus the range of possible translations of 'Weïzagungu' would be 'island where a woman is taken', 'island where a woman is captured', 'the woman takes the island' or, quite simply, 'island of the female Za' or 'island of the Za woman', which brings us back to another woman living on an island, the daughter of Zaa Beeri, Harakoy Dikko, of the Isle of Gambu in the 'W' of the river, a Za woman who was 'taken', 'captured' or 'married' several times, and whose Tooru children were to reign over the island and over the entire central valley of the Niger.

Although Bariba and Yoruba traditions, and especially Kishera or Kisra traditions, seem still to indicate that this part of the central valley of the Niger was a halting point on their migrations, there are a number of striking similarities between, on the one hand, the three brothers Woru Baté, Woru Mansa

and Agusa, all sons of Kisra who, according to Borgu traditions, established Wasangari power at Bussa, Nikki and Illo respectively, and who were said to have been great hunters of elephants and generous providers of meat from the hunt, and, on the other hand, Dongo or Ngwari Fombo, and his brothers Digi Fombo, Digyal Fombo, Magiri Fombo and Tuuro Fombo, all sons of Fombo and grandsons of Borgamu, all Bargancé or Bariba, great elephant hunters or *gaw*.

'History which is recounted', cosmogonic myths and possible contacts between the valley of the Nile and the valley of the Niger

An examination of traditions of origin and cosmogonic myths, particularly those of the Songhay, enables us to draw parallels and make certain comparisons between religious myth and historical tradition, between the Songhay cult of possession and the history of the Songhay. At the same time it allows us to discern in this cult of possession a sort of first event in the primordial history of the Songhay, 'another way of relating history' in which the basic framework is built around the emergence and establishment of Songhay power initially in a geographical and human setting, sometimes itinerant, sometimes settled, which generally confirms that of the historical traditions of the other peoples bordering the Zarma-Songhay area. Nevertheless, the myths and traditions most frequently refer to the east, the north, and particularly the north-east, with the appearance of specific geographical regions such as Yemen, Mecca, Egypt (Misr, Misra) or a region further south which could be either Nubia or Ethiopia. We must, therefore, ask to what extent these geographical references are capable of providing some assistance in the understanding and analysis and, perhaps, the interpretation or reinterpretation of traditions concerning origins with reference to the places where they were formed or developed. This is why we consider it necessary to examine these references in relation to two centres, a point of departure which is the Middle East and north-east Africa, and a point of arrival which is the valley of the Niger, and to do so even if this might at first appear to be a thankless and difficult task.

We will first set aside the hypotheses and comparisons already made between ancient West African migrations and ancient Egypt and will only examine here the references in our source materials which relate to a greater or lesser extent to the historical traditions of the peoples in the central valley of the Niger and, in particular, the traditional myths of origin and the cosmogony of the Songhay.

Traditions of origin and the valley of the Nile

Traditions of origin and possible contacts

Once the possibility of contact is raised, reference to the traditions concerning the origins of most of the peoples in the central valley of the Niger, whether mythical or historical, produces certain striking analogies, particularly if one examines the ethnonyms and toponyms which form the stratigraphic basis of the general ethnogeny.

Thus, with the assistance of the book by E. A. Wallis Budge, *Egyptian Language. Easy Lessons in Egyptian Hieroglyphics*,[23] we can construct several tables of analogies between ancient Egyptian and certain toponyms, ethnonyms,

TABLE 1

Pages in Wallis Budge	Ancient Egyptian	English translation	Analogies with names in the region of the Niger
36 and 106	*Hap, Hapi, Hapui*	God of the Nile	*Hampi*, ritual vase of the ruling Tooru spirits of the Songhay
45 and 47	*Ur*	Great, great man, prince, chief	Urfama, name of a god or ancestor of the Songhay Tooru spirit Dandu Beri or Dandu Urfama
45	*Ser*	Great, great man, prince, chief	Sor(ko), Songhay fishermen; Ser(ki), chief in Hausa; (Ki)sra, (Ki)shera, leader of Bariba migrations
36 and 62	*Heq*	Prince, king, sceptre	Sor(ko), Songhay fishermen; Ser(ki), chief in Hausa; Ki(sra) or Ki(shera), leader of Bariba migrations
47 and 68	*Aoi (athi, azi), henti, Ahi*	Prince, king	
63	*Uà, Auà, Asù*	Bone and flesh, heir, progeny descendants, posterity	Hwa, Huwa, Huwata, Huwatata, ancestors of the ruling Tooru spirits of the Songhay
69	*atur*	Altar of a snake goddess	Tooru, spirit which has an altar among the Songhay; Tooru, ruling spirit of Songhay cosmogony

Pages in Wallis Budge	Ancient Egyptian	English translation	Analogies with names in the region of the Niger
70 and 71	*Suten net*	'King of the south and the north'	Suntaan, ancestor of the Tooru spirits of the Songhay
79	*Uàa, Khet*	Boat, to sail downstream	Hwa, Huwa, Huwata, Huwatata, ancestors of the ruling spirits of the Songhay
87	*Uà*	One	Hwa, Huwa, Huwata, Huwatata, ancestors of the ruling Tooru
89	*ua*	Magic knot (?)	spirits of the Songhay
91	*ba*	Censer	*Batta*, box containing perfumed substances and ritual powders offered to certain spirits for a ritual or magical purpose among the Hausa and the Songhay–Zarma
106	*Hau*	People who lived in the delta	
107	*uat*	Paths, roads	
125 and 164	*Su, suten*	King (of the south) royal	Suntaan and Mantaan, ancestors of the Songhay Tooru
	Suten an	Royal scribe	
	Suten uaa	Royal barge	

names of gods or ancestors and titles appearing in the traditions of origin of the peoples in the central valley of the Niger (Table 1). However, this list of analogies is still rather meagre and the analogies themselves may not seem very convincing. The comparisons of Table 2 may, however, be added:[24]

We may attempt to define with greater precision the content and meaning of the terms or names in the Songhay cosmogony which relate to ancestors or political, military, economic and religious titles, such as: '*Ziinkibaru*' ('Ziin *Ki* the great'); *Faran Maka Boté* ('*Faran* son of Maka and of Boté); *Nako Kanta Bo* (Nabo *Kanta* Bo); *Maīda Ka Faran* (Maīda Ka *Faran*); *Faata Ka Faran* (Faata Ka *Faran*); *Sorko* (*Sor* and *Ko*); *Serki* (*Ser* and *Ki*); terms or names in the historical traditions of the Songhay and the Zarma, such as: *Sorko* (*Sor* and *Ko*); *Ki* or *Ci* of Zarmaganda; terms or names in the historical traditions of the Hausa, such as: *Sarki* (*Sar* and *Ki*); *Makassarki* (Makas-*sar-ki*); Bariba, Bade and Yoruba terms or historical traditions such as: *Kisra* or *Kishera* (*Ki* and *Sra* or *Shera*).

Thus, we refer to the ancient Egyptian where the term *Ser* means 'great'

TABLE 2

Ancient Egyptian	English translation (meaning or attribute)	Analogies with names in the region of the Niger
Aha	First king of the Ist dynasty who reigned *c.* 3200 B.C.; his name means 'the warrior'	Hwa, Huwa, Hwata, Huwata, Huwatata, ancestors of the Tooru spirits of the Songhay
Wawat	Lower Nubia	Hwa, Huwa, Hwata, Huwata, Huwatata, ancestors of the Tooru spirits of the Songhay
Wahankh	Second king of the XIth Dynasty whose name is formed from *wah* and *ankh* (cross with loop meaning 'life')	Hwa, Huwa, Hwata, Huwata, Huwatata, ancestors of the Tooru spirits of the Songhay
Khentamentiu	'The lord of the westerners', *amenti* means 'west' and *khent(a)* 'lord'	Nabo Kanta Bo, other name of Faran Maka Boté
Per-âa or *pir-ô* or *per-âa, ankh, udia, senb, neb*	'The great dwelling' or 'the great house'	Soninke and Manden names: Fama, Fran, Fra Songhay names: Faran, Fari
Mâat	Principle or goddess of Justice, Truth and Universal Order	Mantaan and Suntaan are the ancestors of the ruling Tooru of the Songhay

'great man', 'prince', 'chief' and where the term *Heq* means 'prince, king'. The terms in the traditions of the Niger valley such as Ki or Ci, representing an ancient people from Zarmaganda as in Ziinkibaru or 'the great Ki spirit', that is the chief of the spirits of the River Niger before the arrival of the Songhay Tooru, could be recollections of these *Heq*, while terms such as Sorko, Serki, Kisra or Kishera might simply be redundant forms of the Egyptian terms *Ser* and *Heq* which have the same meaning (Sorko, derived from *Ser* and *Heq*), becoming Ser-Heq, Serki and Sarki, derived from *Ser* and *Heq*, becoming Ser-Heq(?), Kisra or Kishera, derived from *Heq* and *Ser*, becoming Heq-Ser(?), while the Sorko names Faran, as in Faran Maka Boté and Maïda Ka Faran, could be derived from the ancient Egyptian *per-âa* or *pi-rô* or 'Pharaoh'. This is supported by the second name of Faran Maka Boté which is Nabo Kanta Bo in which 'Kanta' might well be derived from the ancient Egyptian *Khent(a)* which is found in the name of the Egyptian god Khentamentiu and means 'lord' or 'the first'.

Thus, the base for the population of the central valley of the Niger or, at least for its initial socio-economic organization, might be mainly Egyptian in origin and comprise the following.

An early layer of population with cultural contributions from the Ki or Ci peoples from Zarmaganda, the spirits of the river or Ziin of the river such as the *karey ki* Sangay Moyo or his son Zirbin Sangay Moyo or even Ziinkibaru who is perhaps a river Ziin because of his alliance with them, although he is placed among the Sorko fishermen who are all considered as *kara* or *karey*, that is to say 'crocodiles' or rather 'male crocodiles' or *karey ki*[25] who were 'the masters of the river' before the arrival of the Tooru spirits of the Songhay; the spirits of the dead or Ziin of the dead such as the Ziin husband of Harakoy Dikko or the Ziin husbands of Nya Beeri who were all considered as *gondi*, that is to say 'snakes'.

A second layer of population or cultural contributions spreading as the Sorko dominate the upper reaches of the central valley of the Niger, the Sarki the Hausa country, the Kisra or Kishera the lower reaches of the central valley of the Niger towards Borgu, the Bade and Yoruba country. This second layer witnesses the unification of two waves of population or cultural contributions which are certainly related but slightly different. Added or juxtaposed to an early layer with *Heq*, *Hq* or Ki or Ci power or traditions, worshipping the *kara* or *karey* crocodile and the *gondo* or *gondi* snake is another new layer with *Sor*, *Ser*, *Sar* or *Sra* power or traditions[26] whose characteristics are not very different except that it is perhaps composed of small 'bare hand' fisherfolk such as Nassilé Boté before his marriage with the Ziin woman or the Ziin Ki woman, Mha or Maka, the mother of the hero Faran Maka Boté and his supplier of magical and technological power in Songhay cosmogony. This alliance between the *Ser* and the *Heq* appears to have taken place through matrimonial links as in the case of Nassile Boté, the *Ser* 'bare hand' fisherman and Mha or Maka, the Ziin woman, or, perhaps, as in the case of Zinkibaru, the great Ziin Ki, whose mother must have been a *Ser* and whence he drew his relationship with the Sorko. The new restructured group which emerged from this fusion of *Heq* and *Ser* might then have consisted of two main subgroups, the *Ser-Heq* and the *Heq-Ser*. The *Ser-Heq* with a dominant *Ser* element would appear to have learned political organization and particularly the technology of weapons and fishing from the *Heq*, perhaps in addition to music and ritual dance, whereas the *Heq-Ser* with a dominant *Heq* element seemed to have learned from the *Heq* political organization and especially weapons technology.

The *Ser-Heq* subgroup may itself have split into two parts with the Sorko on the one hand, great masters of fishing and worshippers of the *kara* or *karey* crocodiles or *gondi* water serpents 'with nose rings'[27] but still struggling with other *Ser-Heq* or Ziin Ki male ancestry like Ziinkibaru, who is considered as belonging to the Sorko but allied to the Ziin and the Ganji-Bi in the struggle

which brought him into conflict with Faran Maka Boté and the Tooru in the Songhay cosmogony. And, on the other hand, the Serki or Sarki, great hunters, metalworkers and worshippers of the *gondi* 'water snake' 'with the horse's head', also called Sarki, who apparently imposed themselves upon the Daura or Dau-ra. The latter are perhaps not unrelated to the Do of the river valley who appear to have been dominated by the *Heq* and with whose descendants the Sorko came to terms for the magic or ritual control of the river up to the present day. The subgroup of the *Heq-Ser* apparently acquired an individual identity as Kisra or Ki/Shera hunters and warriors and left the Sorko upstream and the Sarki in the north-east, moving downstream to the south-east.

A third layer of population or cultural contributions represents a development of the power of the Sorko in the upper reaches of the great Sorko river, assuming the title of Faran or Nabo Kanta Bo, Maïda Ka Faran and Faata Ka Faran, perhaps following the addition of new ethnic or socio-cultural elements which could be the mythical ancestors of the Tooru of Songhay cosmogony.

A fourth level of population or cultural contributions may have been added with the arrival of the mythical ancestors of the Songhay Tooru such as Dandu Urfama or Dandu Beri, Za Beri or Si Za Beri Kayamun, the father of Harakoy Dikko, possibly the weïza-Gungu of historical traditions whose descendants, after briefly accepting the domination or influence of the *Heq* or Ki or Ci, formed an alliance with the Sorko and then destroyed the *kara* or *karey* crocodile and *gondi* snake cults and imposed upon the Ki and the Sorko the cult of their ancestors, particularly Dandu Urfama or Dandu Beri, the first part of whose name could be derived from Ddwn, the sacred name of a Nubian god.[28] 'Urfama' might also be a pleonastic form of the term *Ur* which has the same meaning as *Ser* in ancient Egyptian and the term *fama* which is a form like '*Faran*', '*Fari*' derived from the ancient Egyptian *pi-râa* or *pi-rô* or Pharaoh; or like Si Za Beri Kayamun in which the term *Si* might be derived from the ancient Egyptian *Sih* or *seh*,[29] another variant of *Ser* which means 'noble' and whose name appears in historical traditions in the form of Diãber-El-Yemen or Zã-al-Ayaman, killer of the crocodile or snake or fish-god, formerly worshipped by the people of Kukiya. It is also possible to connect the tradition and name of Za Beri Si Kayamun with the tradition of Zabarkan, the primordial ancestor of Zarma historical traditions who must be the same as Za-Bar-Kaan or Za-Beri-Kaan, in which the term 'Kaan', which is found in Soninke *(Kaana, nya-nya)* with the meaning of 'chief', might be derived from the ancient Egyptian *K.n*[30] and would then mean 'brave', so that Zabarkaan would mean 'Za Beri the brave' or 'Za the great and the brave' or simply 'King Za the Great'.

Farther east, *Hau* and *Seh* or *Seh* or *Sa* elements[31] had already more or less combined to form the *Hau-Sih* or *Hau-Seh* or *Hau-Sa*, the proto-Hausa

of Bayadjidda, and imposed themselves upon the *Ser-Heq* or Sarki, destroyed the cult of the Sarki snake *(makas-sarki)*, borrowing the sociopolitical organization and the title of Sarki and forming an alliance with the ancient stock of the Daura in order to legitimate their power through the female line.

In this new perspective, the different successive layers of settlement and cultural contributions make the general ethnogenic development of the central valley of the Niger much more consistent, whether it occurred locally or was transposed from a separate starting-point to its present point of development.

This new interpretation of cosmogony and historical traditions could be further validated by other elements from these different layers of population. Thus, at the fourth layer which introduced the ideas of *Ur*, *Fama*, *Sih* with the ancestors of the Tooru or ruling spirits of Songhay cosmogony, such as Dandu Urfama or Za Beri Si Kayamun, the genealogy of the gods includes the primordial twins Hassa and Hini who gave birth to Suntaan and Mantaan. These names or ideas are not dissimilar to the ancient Egyptian *suten* which means 'king of the south' or *suten net* which means 'king of the south and of the north' nor to *Maât*, 'principle or embodiment of Justice, Truth or Universal Order', considered as the principle of the omnipotence of the god Râ in the expression *Râ-usr-Maât* and as the 'mother' protectress and adivser of 'Pharaoh', i.e. of the 'king of the south and the north'.

Thus, the Suntaan/Mantaan pair could represent the principle or idea of the initial unitary power of the Pharaoh. This possibility is reinforced by the fact that they are succeeded in Songhay cosmogony by another pair Huwa/Huwata or Huwa/Huwatata in which the term *huwa* might be derived from the ancient Egyptian *Uà* or *Auà* which would mean 'heir', 'progeny', 'descendants', in this case, of the principle or idea of 'Suntaan/Mantaan'.

Za Beri Si Kayamun is also called Maley or Maali—(in the name of Kirey) a title which is perhaps taken from the Gurmanche where the term *maâli*[32] means 'chief' or 'king'. This title is found in Zarma historical traditions in the names of Mali Béro and Mali Kamandugsa which would then mean respectively the 'Great Chief' and 'Chief Kamandugsa'. Therefore, the names of Mali Béro and Mali Kamandugsa would refer to one and the same person, the Great Chief Kamandugsa, who could then easily be compared to Zabarkaan, the primordial ancestor of the Zarma whose name would have the meaning of the Great King Za which we have already indicated and is none other than the Za Béri Si Kayamun of Songhay cosmogony or the Diāber-el-Yemen or Zā-al-Ayaman of the *Ta'rīkh al-fattāsh* and the *Ta'rīkh al-Sūdān* before his South Arabian affiliation. Za Beri Si Kayamun is called Wandu, a word which we can also associate with the ancient Egyptian *Wd* or *Wdt*, meaning 'to command or decree' or *Wdn*, meaning 'to install as God or King',[33] ideas which seem to fit in with the prerogatives and position of Zari Beri Si Kayamun.

Adding to all the points already raised, the fact that the Songhay call *tooru* all those deities which have a collective or separate place of worship or altar, even although the *tooru* are for them primarily their ancestral deities which we refer to as Tooru, written with a capital 'T', and also the fact that the ancient Egyptian word *atur* means an 'altar of a snake goddess' and that, to complete the picture, Songhay cosmogony stresses the fact that the ancestors of the Tooru came from Hurunkum, Urunkuma or Runkuma, from Foot or Foont or the Futti or Fuddi area in Misra (or Egypt), we consider that any interpretation or rather reinterpretation of the cosmogonic and historical traditions of the peoples in the central valley of the Niger must henceforth make reference to the valley of the Nile and north-east Africa, but must also attempt to sift a large number of Near or Middle Eastern sagas, particularly from Yemen and Mecca.

The basic interest of the analogies to which we have drawn attention, even without embarking on a search for a linguistic relationship between pharaonic Egyptian and the present languages of the peoples in the central river valley, is that, most frequently, the names in the cosmogonies and historical traditions have no very clear meaning in the present languages, be they terms such as Ki, Sorko, Serki or Sarki, Kisra or Kishera (although B. I. Musa[34] concluded that *Ki-shira* means 'black king' in the Boko languages, based on the fact that *shira* is an honorific title at Nikki whereas it means 'black' in Boko), Songhay, Hausa, Dandu, Wandu, Si and many others. We are able to undertake clearer and more logical reconstructions by reference to the Egypt of the Pharaohs without attempting to discover whether the basis for the reference is ethnic or cultural, particularly in relation to many texts like those of Songhay cosmogony which are liturgical and suffered relatively few distortions.

The Yemeni, Meccan and Ethiopian sagas[35]

A number of problems of different types are posed by so many standardized traditions which establish links between Negro-African peoples and dynasties and Arab-Islamic peoples and dynasties that, in general, were part of the family or the entourage of the Prophet Muḥammad or of the caliphs who later embraced Islam.

The first problem stems from the fact that almost all of them have a substratum of Negro-African cosmogonic or historical traditions from which the new 'reinterpreted', 'revised' and 'standardized' versions were produced. The first problem is therefore that of tracking down this Negro-African substratum.

Second, almost all of them are 'overlaid' with elements of known cosmogonic and historical traditions of Near Eastern or Middle Eastern origin, in

particular biblical and Arab-Islamic traditions. The second problem is therefore that of tracking down these added elements in their original biblical or Arab-Islamic context.

The second type of problems concerns the way in which this history is apprehended by a Black-African Islamized aristocracy and élite wishing to feel that it had a past in keeping with its new faith and, more particularly, with a keen consciousness of the question of origins. Here, the problem is to track down the 'unofficial' or 'unconverted' version of the popular history of settlement.

On the one hand, there is a history of the Muslim intellectual élite which extends to the Islamized world all or part of the Arab history of Arabia, in particular the question of origins. In this instance, the problem is that of knowing the pre-Islamic history of the Arabs and the Arabian peninsula.

On the other, there is a history which is written or narrated by a man of religion who has not learnt it or learnt how to tell it, or who cannot use the language in which it must be told. In this case, the problem is that of distinguishing between the 'word' of the 'marabout' because he 'must know', from the 'word' of the traditionalist who has learnt the 'word' in order to 'tell', and from the 'word' of the priest who has learnt an ancient 'word' not always 'spoken'.

The Yemeni, Meccan and, sometimes, Ethiopian sagas form an integral part of this series of problems in which Yemen appears with its glorious past as the fabulous country of the Queen of Saba (Saba, Qataban, Ma'in, Hadramawt, then Saba and Raydan or Himyar), flourishing from the fifth century before our era onwards and seen invariably as the 'first history' of the Arabian peninsula. At the same time, Ethiopia is seen as a bridge between the black world and the South Arabian world with the conquest of 'Saba and of Raydan' by the king of Axum in +330, while Mecca sets the seal on the inclusion of the Prophet Muḥammad, the caliphs and the Arab-Muslims in the ranks of the holy.

The Egyptian, Nubian and Ethiopian sagas

References to Egypt, to Nubia or to Ethiopia, grouped under the term of 'Misr' or 'country of misr', are to be found especially among the peoples who have been constituted and organized the longest, such as the Soninke and the Songhay. The interpretation of such sagas undoubtedly poses the greatest problem as there are numerous overlayings and interferences by sagas of the first type. In an effort to distinguish themselves from Arab-type sagas, they do not draw inspiration from biblical or Jewish traditions, as in the case of the verse-chronicle of Dinga Kôré the Elder, the ancestor of the Soninke, or in the traditions of the Daura and the Gobir among the Hausa in which it seems

that memories of distant links between pharaonic Egypt and the Near and Middle East served as the basis for a Judaization of some traditions. This Judaization was later reinforced, especially among the Islamized peoples bordering on the central valley of the Niger, by the references in the Koran to Jewish history. Moreover, in addition to the actual content of the cosmogonic and historical traditions, certain rites and religious practices sometimes show common traits with the known practices of the ancient Nilotic world.

Cosmogony, cosmology and myths along the great rivers

If we restrict ourselves to Songhay cosmogony and to the religion based on possession dances which sprang from it, we cannot avoid making some quite striking parallels with ancient Egypt.

The Egyptian temple, masks, the tooru and Songhay possession cult

Reference has already been made to the analogy between the ancient Egyptian term *atur* or 'shrine of the snake goddess' and the Songhay term *tooru* whose primary meaning is 'deity which is worshipped in a shrine'. Although we can find no examples of possession dances or possession in ancient Egypt, we can still observe that on entering the *nâos*, the Egyptian priest had to recite incantations so that the deity would become embodied and come to life in the statue. In the same way, the Songhay deity materialized itself in most cases on 'its horse' during a ceremony consisting of music, incantations and possession dances.

The origins of myths or battles along the great rivers

The conflict and battles which took place on the banks of the Nile, first between Isis and Seth and then between Horus and Seth, for the acquisition of the throne and power of the ancestor god Osiris, are not dissimilar to the battles on the banks of the Niger between the children of Harakoy Dikko, the water goddess, with both the Ziin of the river and the Ziin of the dead and, later, between the Sorko Faran Maka Boté and Zinkibaru for control of the River Niger, and the alliance with the principal deities or Songhay *tooru*.

Myths of origin

Isis, the mother of Horus, gave Horus a harpoon with which to fight Seth, who changed himself into a hippopotamus. Faran Maka Boté was given his

two harpoons, *zogu* and *babingay*, to fight the Ziin of the river or 'crocodiles' and Zinkibaru their ally, and become 'controller of fishing on the River Niger'. At the same time, in both ancient Egypt and on the Niger, we find an identical method of hunting for hippopotamus, using the same kinds of harpoons. We therefore think that other analogies might indeed be found in the myths about origins and the creation of certain tools and certain types of activities.

In a different context altogether, the 'Country of Pount' from which the ancient Egyptians procured supplies of spices and incense and other tropical foods was considered to be 'the land of the gods'. When the principal Songhay deities say that their ancestors come from 'Foot' in 'Foont' or 'Futti' or 'Fuddi' in Misra or Egypt, and when among these ancestors we find Suntaans, Mantaans, Huwas, Dandu Urfamas and Za Beri Si Kayamuns, all of which are names which might have come from ancient Egypt, we conclude that transposition occurred and that 'Foont' could well be the 'Country of Pount', the 'land of the gods'.

Ceremonies and gods

The *Book of the Sacred Cow* tells us that the god Râ was angry with mankind.

The goddess Hathor, armed with the eye of Râ, was given the task of punishing the sacrilegious people. The carnage which followed was such that Râ took pity on mankind. He had red beer made, which the bloodthirsty Hathor, also called Sekhmet, 'the powerful', took to be blood. She drank it, became drunk and lost interest in killing people. From then on, a festival of the goddess Hathor was celebrated each year by libations. Hathor became the goddess of wine. This story is somewhat reminiscent of that of Dongo's anger and the first *yéné* of *markendé* or 'the first refreshment' during which Dongo taught men how to cure people struck by lightning. This celebration of *yéné*, at the start of each rainy season, became a general appeal to the Tooru for a good farming season. The Tooru, and Dongo in particular, became the deities that provided good rainy seasons and harvests.

Another aspect of ancient Egyptian ritual is reminiscent of the phenomenon of Songhay possession. This is the ceremony of opening the corpse's mouth to enable it to continue to eat and to go about its business in the other world, and the ceremony of opening the mouth of the possessed Songhay so that the spirit seeking to embody itself on its 'horse' can speak and go about its usual business.

Cosmogony and history along the great rivers

We have seen the kinds of relationships that exist between Songhay cosmogony and the history of the Songhay and the peoples in the central valley of the

Niger, especially inasmuch as this cosmogony seems to throw light on 'a great initial event' in the history of settlement.

Egyptian magicians and Songhay magicians: historians of the crises of the beginning and historians of the crises of separation

The myth of Osiris and Songhay cosmogony up till the time when the Songhay Tooru became masters of the river, portray the 'initial sequences of the crises of the beginning' during which deities, ancestors and the men of Egypt on the one hand, and deities, ancestors and the men of Songhay on the other were more or less indistinguishable from each other. The history of Egypt then became the history of a king immediately following the history of another king; but this was a king who, because of his divine power, was, as it were, a hypostasis of all the Egyptian deities, whereas the history of the Songhay in its cosmogonic 'content' recorded only 'crises of separation'.

The cult of the dead or the 'historicization of ancestors'?

The myth of Osiris and the myth of Za Beri and Harakoy Dikko can be said to be similar in some respects inasmuch as they represent 'the primordial history of the possessing ancestors'. But whereas Osiris' successors had pyramids built as a means of gaining access to eternity, the Za Beri Tooru successors became embodied on 'men-horses', and were followed by the successors of the Tooru who materialized simply as 'horses possessed' during possession dances.

Songhay cosmogony made use of this phenomenon of separation to integrate into its pantheon certain deities as the ancestors of newly arrived peoples.

An introduction to the history of the settlement of the central valley of the Niger given the new hypotheses concerning contacts with the valley of the Nile

If contacts existed with the valley of the Nile, then the history of the settlement of the central valley of the Niger is particular in that it encompasses several linguistically different populations. It can provide examples of mythical, cosmogonic and historical traditions agreeing on several points which archaeology can certainly clarify by studying the material remains, in particular the terracotta statuettes from Kareygooru and Bura near Téra.

The question of itineraries in the traditions of the origins of men and gods

There are very few cases where it is possible to trace itineraries or follow them to their source. This problem may possibly be solved in the future, however, given the increasing number of archaeological excavations and the formation of teams of researchers.

The question of ethnogenesis in the history of the settlement of the central valley of the Niger

Ethnogenesis plays a central role in Songhay cosmogony. Archaeology is already providing some answers to settlement as narrated by myth, thanks to the terracottas unearthed at Kareygooru and Bura. The people who made them lived at Kareygooru between $+500 \pm 90$ and $+1070 \pm 90$, but the zoomorphic representations of 'snake' and 'bird' seem to indicate the stratum of Ziins of the river that worshipped crocodiles. The Bura terracotta makers, who are thought to have lived between the third and the twelfth centuries of our era and who attached great importance to secondary burial in and under burial-urns, could represent the Ziins of the dead.

'History which is recounted', 'History which is experienced' and the 'History of historians' between the Niger and the Nile

Historians should have recourse to and use all the resources of all the sciences of the past. These include the oldest or most immutable forms of the traditions, which are 'versions to be listened to' (historical narratives of the traditionist) and 'versions to be experienced' (liturgical formulae of the cult of possession dances), useful and necessary in writing 'a history of settlement' which takes into account data derived from archaeology, history and the iconography of pharaonic Egypt.

Notes

1. Diare Sylla de Yerère, *La légende du Wagadu.* SCOA Foundation for Research in Africa, Third International Symposium, Niamey, 30 November–6 December 1977.
2. Maḥmūd Ka'ti, *Ta'rīkh al-fattāsh*, pp. 43–7, Paris, Adrien-Maisonneuve, 1964.
3. Ibid., p. 43.
4. Ibid., pp. 40–2.
5. Ibid., pp. 49–51.
6. Ibid., p. 49.
7. Ibid., pp. 326–7, Appendix II, inital note.
8. Ibid., pp. 329–31, Appendix II.
9. 'Abd al-Raḥmānul-Sa'dī, *Ta'rikh al-Sūdān*, pp. 6–8, Paris, Adrien-Maisonneuve, 1966.

10. Diouldé Laya, *Traditions historiques Zarma-Songhays* [Zarma-Songhay Historical Traditions], pp. 33, 35, SCOA, Niamey, Foundation for Research in Africa, 1977.
11. Obaré Bagodo, 'Le royaume Borgou Wasangari de Nikki dans la première moitié du XIXᵉ siècle: Essai d'histoire politique' [The Borgu Wasangari Kingdom of Nikki in the First Half of the Nineteenth Century: An Essay in Political History], pp. 25–31, Cotonou, National University of Benin, Faculté des Lettres, Arts et Sciences Humaines (FLASH), Centre National de Publications Universitaires (CNPU), 1978, 233 pp. (Thesis for an M.A. degree in history.)
12. This information is drawn from ibid., pp. 25–31.
13. S. O. Biobaku, 'The Origin of the Yorubas', quoted by Boubou Hama, in *Enquête sur les fondements et la genèse de l'Unité Africaine* [An Enquiry into the Foundations and Origins of African Unity], pp. 221–4, Paris, Présence Africaine, 1966.
14. C. K. Meek, *The Northern Tribes of Nigeria*, Vol. 1, pp. 71–2, London, Frank Cass, 1971; O. S. M. Temple, *Notes on the Tribes of Northern Nigeria*, London, Frank Cass, 1965, 376 pp.
15. Jean Rouch, *La religion et la magie Songhay*, Paris, Presses Universitaires de France, 1960; we have drawn the basis of Songhay cosmogony from Rouch's account, taking other, oral sources into consideration.
16. Rouch, op. cit., p. 56.
17. Rouch, op. cit., pp. 58–9. The two heroes are the sons of two Ziin sisters, according to some traditions.
18. G. Dieterlen, 'Note sur les Kouroumba du Yatenga septentrional' [Note on the Kurumba of Northern Yatenga], *Journal de la Société des Africanistes*, Vol. X, 1940, pp. 181–9.
19. Rouch, op. cit., pp. 95–102, verses 47, 61, 62, 91, 92, 384 and 385.
20. Rouch, op. cit., pp. 111 and 120.
21. Dieterlen, op. cit., pp. 181–9.
22. Association SCOA pour la Recherche Scientifique en Afrique Noire, *Actes du Colloque (histoire et tradition orale)*, Troisième Colloque International de l'Association SCOA, pp. 125–82, Niamey, 30 November–6 December 1977.
23. E. A. Wallis Budge, *Egyptian Language. Easy Lessons in Egyptian Hieroglyphics*, London, Routledge & Kegan Paul, 1973.
24. G. Rachet and M. F. Rachet, *Dictionnaire de la civilisation égyptienne*, Paris, Larousse, 1968.
25. In Egyptian mythology, the crocodile Sobek is 'the devourer' of souls which have been unable to account for themselves. However, temples and the town Crocodilopolis were built in his honour and he was considered as 'risen from the primordial waters' and invoked as the 'Bull of Bulls, Great Male Being', god of fertility in the region of the lakes, while he was considered as a monster in other regions of Egypt. In Jean Chevalier and Alain Cheerbrant, *Dictionnaire des symboles* (CHE–G), p. 139, Paris, Sushers, 1973.
26. Our ignorance of ancient Egypt is such that we do not know the relationship and the difference in space and time between the ideas of *Heq* and *Ser*, except for the fact that *Heq* is represented in hieroglyphs by a man holding a sceptre while *Ser* is represented by a man holding a simple stick (?).
27. According to Herodotus, the inhabitants of certain Egyptian villages in the Fayyūm such as Crocodilopolis or Shedet considered the crocodile Sebèk to be a sacred animal and adorned it, cared for it and fed it. 'They decorated its ears with gold and crystal earrings and attached bracelets to its forelegs; they fed it on selected remains of sacrifices and cared for it to the best of their ability: when it died they embalmed it and dedicated a burial place to it', quoted by Rachet and Rachet, op. cit., p. 85.

28. Cheikh Anta Diop, *Parenté génétique de l'Égyptien pharaonique et des langues négro-africaines*, pp. xxxvii, 294, 306 and 380, Dakar, Nouvelles Éditions Africaines, 1977.
29. Ibid.
30. Ibid., p. 332.
31. Ibid., pp. xxxvii, 294 and 396. *Hau* is apparently the name of a people which lived in the delta of the Nile and *Sa* means 'rich', 'great' or 'ruling prince' in ancient Egyptian.
32. Y. Georges Madiega, *Contribution à l'histoire précoloniale du Gulma (Haute-Volta)*, pp. 52 and 258, Wiesbaden, Franz Steiner Verlag, 1982. (Studien zur Kulturkunde, 62.) *Maali* was apparently the title of the king of Gobnangu, one of the southern provinces of Gurma where the dynasty was established by 'Biyala, a Hausa hunter who probably came from Gobir (and who) married the daughter of a Bado from Tindangu (a village of Gobnangu)'. This same Gobnangu apparently retained the practice of modelling figurines such as those found at the archaeological sites of Kareygorou near Niamey, which have been dated to between the fifth and twelfth centuries of our era.
33. Cheikh Anta Diop, op. cit., p. 191.
34. B. I. Musa 'Political and Economic Relations in Bariba States', pp. 118–32 (Ph.D. registered at Birmingham, photocopy at Zaria). 'Kisra legend' in *Bornu Seminar*, ABU-Zaria and ABC-Kano, 1973. Bagodo, op. cit., pp. 25–32 and note 2, p. 26, quoting Musa.
35. From here on we shall endeavour to put forward general ideas that we hope to be able to develop later.

Society in the Lake Chad area at the end of the Byzantine period, prior to the introduction of Islam

D. Lange

The central Sudan region has undergone considerable ecological changes over the centuries. It is known that during wet periods in neolithic times Lake Chad expanded to cover an area very much larger than that produced by variations in historical times. Even if the idea of a 'Mega-Chad', which presupposes the continuous existence of a vast expanse of water, is becoming increasingly indefensible, it can be assumed that various regions between Aïr and the Dārfūr mountains were covered by great marshes. The protohistory of the peoples of the central Sudan and the slow crystallizing of social distinctions should be studied against a background of major ecological changes.

It must also be recognized that in the absence of written sources during the pre-Islamic period the same degree of precision cannot be achieved for sub-Saharan as for Mediterranean regions. With regard to the region that concerns us here, we must make do with sketchy information which so far has received little confirmation. I hope, however, that this chapter will provide research guidelines which can be followed by linguists and archaeologists who are, in their own disciplines, seeking possible correlations with history. The term 'archaeo-linguistic' was recently coined to describe such investigations.[1]

Fishermen and stock-farmers

The first working hypothesis is the distinction drawn between fishermen and stock-farmers, which, starting with the long wet period of the Holocene may correspond, for the central Sudan, to the distinction drawn between speakers of Chad languages and those of Nilo-Saharan languages.

It is now recognized that Chad languages are a branch of the great Afro-Asiatic (Hamito-Semitic) family. The coherence of the Chad group of languages can probably be explained by the prolonged evolution of proto-languages in a geographical environment favourable to linguistic contacts and exchanges. It may be assumed that the various southern regions of the central Sahara provided the best living conditions during the wet periods. At the beginning of the third millennium before our era, however, these conditions began to deteriorate rapidly, and it is possible that speakers of proto-Chad languages

were forced from this period onwards to withdraw to regions further south. However, it cannot be ruled out that these peoples may have abandoned the Ténéré, Djourab and other regions—where bone remains indicate that they were formerly covered by marshes or lakes—at a later period. They may have gradually lost their Sudano-Mediterranean features as they came into contact with Negro-African groups. Today, various groups of Chad-language speakers are to be found withdrawn in remote areas between the Niger and the Waday region. The Lake Chad region is, however, the geographical centre. The Buduma (Yedina) fishermen and the Kuri still occupy the islands and the eastern shores of the lake. To the south of Lake Chad is another Chad people, the Kotoko, settled on the easily flooded plains of the Chari river, for whom fishing is also a primary occupation.

It should be possible from a study of the technical vocabulary of fishing to establish whether, with the exclusion of recent borrowings,[2] this vocabulary belongs to proto-Chad, or on the contrary is derived from an ancient Saharan or Nilo-Saharan language.

Farmers and nomads

A second working hypothesis would be to explore the relationships between speakers of Nilo-Saharan languages and neolithic peoples of Saharo-Sudanese tradition. This would include testing the hypothesis of ancient relations between pastoral peoples who spoke Saharan languages (Tubu and Zaghāwa) and those who spoke Songhay languages (Igdalen and Iberogan).

Unlike the Afro-Asiatic languages, the Nilo-Saharan group of languages is spoken only within the Negro-African context. The most western of the languages in this group is Songhay, which is spoken all along the Niger river from Jenne to Gaya. Further north, however, there are also small groups of oasis farmers (Sudanese) and a few groupings of nomadic camel farmers (of Berber origin) who speak various dialects of Songhay.[3] The second subgroup of the Nilo-Saharan family is Saharan, which includes Zaghāwa, Teda-Dazza and Kānembu-Kanuri.[4] Today Songhay is no longer in contact with any Saharan language, but the many lexicographical forms common to the two linguistic groups suggest that Sudanese pastoral peoples who spoke Nilo-Saharan languages occupied a large part of the area between the Niger bend and the Ennedi mountains. The break in the geographical continuity of these peoples may have been due to the combined effect of the desertification of the Sahara and pressure from invading Libyan Berbers in the last centuries before the Christian era.[5] In the east, proto-Songhay speakers may have founded Kāw-Kāw (Gao), while speakers of proto-Saharan languages may have founded Kānem in the Lake Chad region.[6]

A comparative study of technical terms relating to agriculture and stock-farming may show whether, underlying the distinction between the Kānembu farmers and the Teda-Dazza pastoral peoples, there was an earlier unity between the two Nilo-Saharan groups (Saharan and Songhay) which was based on stock-farming.

Blacksmiths and aristocratic warrior castes

A third hypothesis attempts to relate the beginning of the Iron Age in the Lake Chad region with the appearance of a caste of smiths, the Dugu (or Haddād),[7] who seem to have enjoyed a specially privileged position at the time of the Zaghāwa.

The dates at present available with regard to the dissemination of iron-working techniques seem to indicate that certain peoples in the region lived for a long time cut off from the major innovations of the time. Here the main divide seems to have been between east and west rather than north and south. It is now known that in the south of Aïr, the technique of iron manufacture was practised at Ekne Wan Aparan from —540 ± 90.[8] This date is fully in accordance with that of —440 ± 140 obtained at Taruga (the Nok culture) in central Nigeria.[9] In the Termit region, extending from Aïr to Lake Chad, iron seems to have been worked even in the seventh century before our era.[10] Elsewhere, iron manufacturing techniques were adopted considerably later. Traces of a culture based on ironworking have been discovered at Koro Toro, between Lake Chad and Tibesti. Known as Haddadian, from an Arabic term which means 'smith', the culture flourished only between the fourth and eight centuries of our era. Painted pottery found on the same sites makes it possible to establish links between this culture and two great civilizations of the Nile valley, the Meroe and Christian Nubian civilizations.[11] Further data are available for the region along the southern shores of Lake Chad. According to somewhat doubtful datings, iron appeared on the important site of Daīma only in the fifth or sixth century of our era, and iron manufacturing techniques were adopted at a still later period.[12] These few indications from iron archaeology show that before the founding of Kānem the lake region was characterized more by divisions and different stages of development than by unifying factors.

The formation of castes of smiths, a particular feature today among the Tuareg and nomads who speak Saharan languages, less so in Kānem and almost non-existent in Bornu, should probably be linked to the existence or absence of centralized political systems. In an uncentralized state such as Kānem under the Zaghāwa, blacksmiths seem to have had specially favoured relations with the aristocratic warrior caste.[13] It was only after the expulsion of the Zaghāwa in the eleventh century that the Haddād smiths seem to have

become a closed subordinate caste among the speakers of Saharan languages to the east of Lake Chad.

Trans-Saharan trade and the rise of a warrior aristocracy

A fourth hypothesis is that the formation of a warrior aristocracy united by family ties and common interests may have resulted from the speeding up of trans-Saharan trade in the Byzantine period. Only archaeological excavations can establish the antiquity of trans-Saharan trade in the central Saharan region. At present, the only known site from which data dating back to the Byzantine period may be obtained is Gezebi, in Kawār.[14]

In addition, however, we now have the outstanding study by T. Garrad, who has established from numismatic data that the trans-Saharan gold trade began in the fourth century and assumed considerable proportions in the sixth, seventh and eighth centuries. The ultimate destination of this trade was Tunisia, and the deposits worked were probably those of Bambuk and Buré, but the author does not rule out the possibility that some of the gold may have come from the region of present-day Nigeria. If this is borne out, it could explain the early traffic along the Kawār route.[15]

A continuous process of the transformation of social relations began towards the middle of the first millennium of our era. It was set off indirectly by the introduction of the camel into North Africa and its adoption by the Berbers of the Sahara. With the camel, which is much better adapted to the natural conditions of the Sahara than the horse, it was easy to travel great distances across the desert with relatively heavy loads. Natural conditions were particularly favourable for crossing the Sahara between Fezzān and the Lake Chad region: a series of small oases and natural water points along the route, and midway the very large oasis of Kawār, made it an ideal caravan route. Up to now, however, there is in fact no specific evidence which permits us to state the date or circumstances of the establishment of regular trading between the two halves of the central Sahara. The existence in Fezzān of the ancient kingdom of the Garamantes was certainly an important factor in the organization of long-distance trade, but in the absence of specific archaeological evidence for the southern oases of Fezzān and Kawār, only conjecture is possible. It seems, however, that from the ninth century onwards the central Saharan route was frequented by small Fezzān caravans, since according to ninth-century sources Cugba b. Nāfic, the famous Arab conqueror, would have found it difficult to get as far as Kawār if the route had not already been established by Berber merchants.[16] The oasis of Kawār, however, was certainly not the goal of these voyages; in all probability Berber merchants had already travelled beyond this

staging post to the Lake Chad region. Here a number of factors, comprising, in addition to the arrival of trade, the increased mobility of the nomads and the use of iron weapons, led to the founding and expansion of a great political entity, Kānem, whose unifying strength and capacity for innovation influenced the destiny of the entire region up to the beginning of the colonial period.

Systematic excavations of the Gezebi site should provide material on which to base the chronology of trans-Saharan traffic. If the deepest layers of this site go no further back than the period of the Arab conquest of North Africa, attention should be turned towards exploring sites in southern Fezzān or the oasis of Fachi (Agram).[17] Nevertheless, the ninth-century dating obtained by T. Shaw for the very rich Igbo-Ukwo culture—which already used the lost-wax casting process—is an initial pointer to an ancient copper trade in the central Sudan region.[18] There can be no certainty, however, about a link between trans-Saharan trade and the emergence of a warrior aristocracy in central Sudan.

Kanuric-speaking conquerors and the indigenous peoples of 'Sao'

Another hypothesis suggests that 'palaeonegritic' civilizations may have acquired numerous distinctive traits in the course of their contact with aristocracies of warriors of the 'neo-Sudanese' civilizations. In particular, it would be wrong to consider the 'Sao civilization' as a substratum of the states established in the central Sudan. Moreover the civilizations which, according to rcliable datings, effectively preceded the establishment of the great states known from Arab sources, testify in the same way as the civilizations unearthed by archaeology to indigenous development and external influences.

To the south of Lake Chad, in the clayey plains of the Lower Chari, the Kanuri came into contact with an ancient civilization which distinguished itself by a remarkable representational art.[19] From the archaeological excavations carried out by G. Connah on the Daïma site it is known that the inhabitants of the *firki* plains had, during a first period before the Christian era, a mixed economy which combined agriculture with stock-farming and fishing. According to Connah, the second period, which started at the beginning of the Christian era, seems to have been characterized by the introduction of iron manufacturing techniques. This important innovation had a direct impact on productivity and on the settlement process: the intensification of agricultural activities, in particular the prevalence of flood-water farming, relegated the other activities of cattle rearing and fishing to the background. The appearance of mud buildings in the second period shows that the inhabitants of Daïma

had adopted a sedentary way of life incompatible with the requirements of transhumance. During the third period, from *c.* +700 to *c.* +1050, the inhabitants of the *firki* plains began to live in greater plenty: various objects were introduced for the first time through long-distance trade, and traces of handweaving are to be found (long before the advent of Islam). The production of objects in human and animal form seems to have developed further during this period, and for the first time Daïma potters manufactured very large jars which today are considered by the inhabitants of the region as the distinctive sign of the 'Sao civilization'. Another important innovation relates to fortifications. At Daïma, Connah has found the remains of a ditch surrounding dwellings on a hill, and it is possible that other hills were protected by defensive walls.[20] It may not be too bold a conjecture to see in the emergence of defensive works the first sign of a threat from outside which later weighed heavily on the destiny of the farmers of the Chari plain, and which it is not difficult to identify with the advance of Kanuric-speaking warriors.

After many centuries of political and cultural domination by Kānem-Bornu, the Kotoko, who now inhabit the *firki* plains, use the term 'Soo' or 'Sao' to designate their 'animist' ancestors. As this term is used in all the regions where Kanuric speakers replaced the previous inhabitants, it can be assumed that it was originally a Kanuric term used everywhere to designate native peoples who had been unable to resist assimilation.[21] Properly speaking therefore, the expression 'Sao civilization' should be applied both to the relatively well-known culture of the ancestors of the Kotoko—which corresponds to its accepted use today—and to the ancient cultures of Komadugu Yobe and the inhabitants of the southern part of Baḥr al-Ghazāl.[22] Yet from an archaeological viewpoint, no similarities seem to exist between these three very different groups. Only their dependence on the Borno sultanate and their status as nations benefiting from *dhimma* ('protection') could give them a semblance of unity.

Conclusion

If trans-Saharan trade had already developed considerably in the Byzantine period, as many indications suggest,[23] it can similarly be accepted that an aristocracy of Zaghāwa warriors had already established its domination over the sedentary peoples of Kānem to the south of the great central Saharan route. But its domination took the form of a centralized state only in the time of Dūnama Dībalāmi (*c.* 1210–48). This state was far more clearly structured a century later, after the Sēfuwa had moved from Kānem to Bornu. It was only at this later period that speakers of the Saharan languages in Kānem-Bornu, united by the rapid spread of Islam, abandoned the caste system which

is characteristic of the Sahelian region and is especially ingrained wherever the state is still in the preliminary stages of formation.

Notes

1. Cf. C. Ehret and M. Posnansky (eds.), *The Archaeological and Linguistic Reconstruction of African History*, Berkeley, Calif., University of California Press, 1982.
2. In the thirteenth century Kanuric-speaking peoples had boats in which they navigated on Lake Chad, then known as Kuri (Ibn Sa'īd). Thereafter the lake seems to have been dominated by Chad speakers.
3. Cf. R. Nicolaī, 'Les dialectes du Songhay', University of Nice, 1979. (Thesis.)
4. The linguistic classification followed here is that of J. Greenberg, *The Languages of Africa*, The Hague, Mouton, 1966.
5. According to P. Munson, the arrival of the Libyan Berbers (Mauretania) dates from the seventh century before our era ('Archaeology and the Prehistoric Origins of the Ghana Empire', *Journal of African History (JAH)*, Vol. 21, No. 4, 1980, pp. 462–5). See also the article by J. P. Roset on pages 113-146 of this book.
6. Ehret and Posnansky (op. cit., p. 243) put forward the hypothesis that the proto-Chad language may date back to the 'neolithic' Saharan peoples of the sixth millennium before our era. For more recent periods, reference must also be made to the study by D. Saxon, 'The History of the Shari River Basin, *c.* 500 B.C.–A.D. 1000', University of Los Angeles, 1950. (Ph.D. thesis.)
7. A first anthropological study of the Dugu, by E. Conte, has now been published under the title *Marriage Patterns, Political Change and the Perpetuation of Social Inequality in South Kanem*, Paris, ORSTOM, 1983.
8. Information communicated personally by D. Grébénard.
9. Cf. R. Tylecote, 'Iron Smelting at Taruga, Nigeria', *Bulletin of Historical Metallurgy* Vol. 9, 1975, pp. 49–56.
10. Cf. R. Quéchon and J. P. Roset, 'Prospection archéologique du massif de Termit (Niger)', *Cahiers de l'ORSTOM* (French Office of Overseas Scientific and Technical Research), Vol. 11, No. 1, p. 97. (Série Sciences humaines.)
11. Cf. F. Treinen-Claustre, 'Eisenzeitliche Funde aus dem Nord-Tschad', in R. Kuper (ed.), *Sahara: 10 000 Jahre zwischen Weide und Wuste*, pp. 330–3, Cologne, 1978.
12. G. Connah, *Three Thousand Years in Africa: Man and His Environment in the Lake Chad Region of Nigeria*, pp. 146–7, Cambridge University Press, 1981.
13. Cf. D. Lange, *Chronologie et histoire d'un royaume africain*, pp. 151–4, Wiesbaden, 1977.
14. Cf. D. Lange and S. Berthoud, 'Al-Qasaba et d'autres villes de la route centrale du Sahara', *Paideuma*, Frankfurt, Vol. 23, 1977, pp. 21–2.
15. Cf. T. Garrad, 'Myth and Metrology: The Early Trans-Saharan Gold Trade', *JAH* (London/New York, Oxford University Press), Vol. 23, No. 4, 1982, pp. 443–61.
16. Two authors refer to Cugba b. Nāfic's expedition to Kawār: Ibn 'Abd al-Hakam, *K. Futūh Misr*, Torrey, p. 195, and al-Bakrī, *K. al-inasālik*, de Slane, pp. 13–4. For translations from the Arabic, see N. Levtzion and J. Hopkins, *Corpus of Early Arabic Sources for West African History*, Cambridge University Press, 1981.
17. Cf. Lange and Berthoud, op. cit., pp. 19–40.
18. Cf. T. Shaw, 'Those Igbo-Ukwo Radiocarbon Dates: Facts, Fictions and Probabilities', *JAH*, Vol. 16, No. 4, 1975, pp. 503–17.

19. J. P. and A. Lebeuf, *Les arts Sao, Cameroun, Tchad, Nigeria*, Paris, 1977.
20. The presentation of the chronological sequences of 'Daima culture' closely follows the theories of Connah, op. cit., pp. 99–196.
21. In the Daïma region it is only a few generations since the Kotoko adopted the Kanuric language. They now regard themselves as Kanuri.
22. In the thirteenth century, these were known by the name of Makari, which is still the name given to them today by the Kanuri (cf. D. Lange, 'La région du Lac Tchad d'après la Géographie d'Ibn Saïd', *Annales Islamologiques*, Vol. 16, Cairo, 1980, pp. 149–81.
23. Cf. Garret, op. cit.

Society at the end of the Byzantine period until the eve of the Arab conquest

Bollo-Bi Kouahi

Introduction

Traditional historiography has firmly established the idea of a North Africa whose past development has been nothing but an endless succession of foreign conquests. 'It is truly extraordinary', wrote E. F. Gautier, 'that the Maghrib has never been its own master. No matter how far back we delve into the past, we find layer after layer of *foreign* dominations.'[1] This view is so widely accepted that on reading most French authors we are left with the impression that North Africans have always been mere spectators of the events taking place on their territory. For example, the indigenous people were not granted recognition in their own history, as it was considered that 'this race, which has an irrepressible vitality, has no *positive individuality*'.[2] Our basic textbooks for the most part restricted their study of the formation of societies in ancient North Africa to those of the colonial towns and their more or less fully Romanized inhabitants. Apart from these, incidental mention is made of uprisings by the independent Berbers, which do not appear to have affected the course of history in any way. So the question has been raised, and with reason, whether the celebrated independent Berbers who abound in our textbooks were not 'left out of history'.[3]

To correct this unfortunate impression, G. Camps drew attention not long ago to the permanent nature of the Berber presence. But if the latter does indeed underpin North Africa's entire history, is it accurate to speak of the 'ahistorical' Berbers, as the subtitle of G. Camps's absorbing work[4] would seem to indicate? On the other hand, are we sure that throughout the centuries of, *inter alia*, Punic, Roman, Vandal and Byzantine occupations, there was a dichotomy between 'the Berber who remained Berber and the Berber who became Roman'?[5] In any case, we are convinced that any attempt to take a categorical stand on a question that calls for subtle distinctions is likely to blind us to the very complex nature of the real situation. To borrow P. Vidal-Naquet's turn of phrase, North Africa changed from a society in which the status of the individual varied along a spectrum from the Roman at one end and the Berber at the other, to a society in which the opposition between the two was less distinct, and less radical.

Indeed, Rome did not bequeath a bipolar society to Byzantium after the Vandal intermission; it left, rather, a multipolar society in which people of different origins and cultures lived side by side, with a host of slight variations; and it was this that Justinian inherited. It was a composite society with diverging interests. It encompassed Romans, fully Romanized and semi-Romanized Africans, unassimilated Berbers from inside and outside the *limes*, as well as newly defeated Vandals that the Byzantine authorities wished to cast in the Roman mould. In a population composed of many distinct groups, room for manoeuvre is rather limited. A policy of restoration involving radical measures becomes even more difficult in such circumstances.

The ambition of Justinian, an Illyrian who saw himself as heir to the Roman traditions, was to re-establish the empire of Rome's great emperors, by restoring both its territorial integrity and its practices. The preamble to the constitution expressing the imperial ideology makes frequent reference to this desire for a return to classical tradition and to the heritage of the emperors from Augustus to Diocletian. The same motives underlay his internal policies, whether reorganization of central government, provincial government, or relations with the Church. But Byzantium's ambition to succeed Rome in Africa ran into the obstacle of disparities of geography and of peoples. It could ignore neither the uneven influence of Roman culture on the African continent, nor a century of Vandal occupation. The arrival of the Vandals disrupted earlier provincial structures. In particular, it compromised the social order of the Roman period. The policy of Romanization had encouraged divisions in the population and sanctioned the privileges enjoyed by bona fide and naturalized Romans *vis-à-vis* the indigenous peoples. By calling all established rights into question, and lowering the élite to the level of the common people, Vandal colonization tended to homogenize all sections of the African population. It thus, in effect, sowed the seeds of national awareness. It was a powerful unifying factor, and ultimately helped to foster the Berber renaissance.

Such was the state of African society when the Byzantine conquerors arrived. But in contrast to the problems which apparently beset this society as it developed, there is unanimous agreement on Libya's economic prosperity. 'How prosperous Africa was when we arrived, O companions', exclaimed Corippus at the beginning of Book III of the *Iohannis*.

Despite the torments that the hateful Geilamir had inflicted on the Africans, despite the ruins accumulated by that culpable prince, Africa was still beautiful when the great Belisarius subdued the town of the Sidonians. . . . Africa was not less prosperous after the king had been made prisoner and peace restored. I left Libya rich and well cultivated, and after my departure she preserved and even surpassed her former splendour. For my memory is faithful. She was fertile, with abundance of harvests, and everywhere one could see the shining fruits of the olive-tree and the flowing juices of the vine.[6]

Procopus, also an eye-witness, corroborates this impression of wealth: 'It is the richest of regions, producing everything needed to sustain life.'[7]

Cereals, fruit trees and vineyards seem to have filled the landscape seen by the conquering Byzantines when they first arrived and settled in North Africa. According to Procopus, the area between Carthage and Hadrumetum had 'the most magnificent orchards that we had ever seen'.

Considered from this angle, the Vandal conquest cannot be defined solely in terms of massacres, lootings, fires and terror. And the reputation for destruction which the name Vandal evokes to this day would thus appear to be not altogether warranted. On the contrary, all sources blame the Byzantine administration for Libya's economic and social decline. From the social point of view, the regression seems to date back to the period of Justinian, notwithstanding the imperial propaganda which would have us believe the opposite. Procopus clearly distances himself from official information in order to expose Africa's deplorable plight and the resulting troubles:

> In point of fact, after the defeat of the Vandals, Justinian made no move to bring the country firmly under his control, and he himself administered Africa from a distance, drained and plundered it at will. He sent officials to assess the land, levied very heavy taxes which had not existed hitherto, and claimed the best land for himself. He forbade the Arians to perform their religious ceremonies, deferred the sending of reinforcements and always treated the army harshly: all this gave rise to problems which ended in major disasters.[8]

This excerpt from the *Historia Arcana* lays bare, concisely and with possibly not a little exaggeration, the broad outlines of Byzantine policy in North Africa: *inter alia* the levying of new taxes, the restoration of religious orthodoxy, legislative land reform, relations with the tribes, etc.

The difficulties of rural restoration

The characteristics of land administration in Roman Africa are well known. Rome had expropriated tribal lands or those of Berber families, and these were handed over to the immigrants. On this land the former owners were reduced to working as agricultural labourers, or restricted themselves to living on reserves inadequate for cultivation, or else they had to leave the *limes* entirely. Tribal lands were taken over by the emperor, the Church or rich individuals.

Vandal domination completely changed the rural landscape. Many Roman landowners were dispossessed of their property by the conquerors and were often reduced, on their own land, to the same condition of serfdom as their former African servants. The lands of the Vandal king were constituted

to the detriment of those of the Roman aristocracy. The property of the Catholic Church was taken over by its Arian adversaries.

Rural restoration in this case had a single objective: restitution to the Church and to the Roman aristocracy of the lands of which they had been dispossessed by the Vandals. The lands taken from Vandal soldiers therefore passed into the hands of the treasury or the private sector. The Byzantine emperor took over the property of the Germanic kings, and indigenous landowners were simply deprived of their property in the name of Justinian.

The new status of individuals also makes for interesting study. The Vandal presence led many serfs and *servi rustici* to abandon their master's domain in order to live as freemen or to take holy orders, and agricultural production suffered as a result. For the *possessores*, restoration also signified the return of fugitives to the land they had left. Their claims also extended to the children of their former servants, born after their flight. However, the laws established by the emperor were reasonable. They allowed serfs who had left the land before the imperial army's arrival to remain free, and those who had taken refuge in the Church to stay there. The law of 533 stated that the children of an *adscriptitius* and a freewoman were to be freemen. By contrast, the old law was enforced in all its severity against serfs who escaped after the Byzantine conquest.

These liberal measures displeased the landowners, who were witnessing an increasing rural exodus. Their complaints led the emperor to modify his measures somewhat. He thus stipulated that, while remaining free, the children of an *adscriptitius* and a freewoman were to remain attached to the land on which their father lived. Justinian's successors went further. They simply brought back the old Roman law. Justin II and Tiberius justified their measures in +570 and +582 on the grounds that 'the land [should] remain under cultivation'.

It was forbidden to dispose of land belonging to the Church by selling, donating or exchanging it. Workers on such land had fully recognized status under the law.

As regards taxation, mention should also be made of the greed and extortion of Byzantine tax collectors, whose chief objective was to supply Constantinople with wheat and oil and to gather heavier taxes than those levied by the Vandals, whose departure was now regretted.

The emperor's failure to impose a new order was accompanied by an equal failure to maintain the religious unity which the condemnation of Arianism had re-established for a time. One heresy was removed only to be replaced by three others. These were Nestorianism, monophysitism and monotheism, and they once again gave rise to dissension during council meetings, vehement opposition to imperial and papal authority and persecution.

The descriptions to be found in *Historia Arcana* are by no means

exaggerated and the consequences of the emperor's inconsistent measures were not long in coming. They caused discontent everywhere, and everywhere the fires of rebellion were kindling. Contemporary authors have left us edifying testimonies. They all agree that a land which in the past had been very prosperous was being reduced to poverty and was becoming depopulated, since it was constantly subjected to plundering raids by the Moors. Corippus, too, describes the ill-treatment of Africans, chained and led off into captivity across a country reduced to ashes. The poet was pained to see 'one-third of the world, the whole of Africa, perish in the midst of the flames and smoke of fires'.[9]

Rebellion was breaking out everywhere—if, indeed, it had ever ceased. Mention may be made of some of the serious uprisings which thus became landmarks in the history of the Byzantine domination of Libya. The year 534 saw the beginning of tribal raids on towns in Byzacena and Numidia. Aurès became the refuge of rebels from the regions, while army mutinies supported by the Berbers and the rivalry between the Byzantine leaders weakened the imperial troops. The seriousness of the situation worsened after Justinian's death in +565. Garmul won signal victories, in spite of the administrative measures taken to strengthen military power. In +595, Carthage itself all but fell to the insurgents. In +646, assured of the support of many Berber groups, the Exarch of Africa proclaimed himself emperor and mustered an army composed of Africans.

The facts thus show that life in Byzantine Libya ebbed and flowed with the movements of the major Berber tribes.

The problem of the African tribes

Byzantine laws were not restricted to Romanized Berbers, and it must be borne in mind that the latter certainly did not represent the whole of Barbary. Indeed, the official borders of the provinces should not be confused with their real borders. This was the main bone of contention between Romans and Berbers. For the Berbers, irrespective of the nature of the central authority, the question of the legal possession of land did not arise. Territory was less important to the sovereign than the people inhabiting it, and theirs was a system in which only individual relationships were of value. To their way of thinking, an alliance was a personal matter and established a link not between two states but between two individuals. It in no way impinged on freedom of access. For the Romans, however, domination was exercised simultaneously over people and land. Furthermore, here we have two peoples, one of which abhorred a nomadic existence, while the other was very jealous of its freedom. This was a source of frequent conflicts with Rome. Vandal domination, which did not take over the full area of territory as under Roman jurisdiction, restored

their freedom of movement to the Berbers. But the Byzantine administration, in accordance with pure Roman tradition, wished to revert to the policy of restricted residential areas and confiscation of common lands. This led to risks of open conflict with the increasingly powerful Berbers.

Indeed, during the period of waning Roman power, the tribes had regained their full independence and established powerful kingdoms. These came into being between the fifth and sixth centuries alongside the Roman provinces at first, and later in those areas of territory previously occupied by the Romans which the Vandals did not occupy. The kingdoms subsequently existed alongside the Vandal state. There were about a dozen in all mentioned here and there, but we shall devote our attention to just four of them. They are the kingdoms of Volubilis, Orania, Aurès and Numidia. A kingdom of this kind was formed by a grouping or confederation of tribes whose chief bore the title of *rex* (king) or even that of *imperator* (emperor). We saw earlier how the Vandal presence led to some integration of the Romans with the general African population. Their presence among the Berbers was an excellent factor for promoting progress, unity and national awareness. Many of them became regional political leaders and organized resistance to Byzantine authority after a period of service in the imperial army. A case in point is that of Masuna, the king of Orania who proclaimed that he belonged to both the Romans and the Moors: *Rex gentium maurorum et romanorum* (king of the Moors and the Romans). He modelled his administrative organization on that of the Romans, with towns being governed by prefects and procurators. We also have the equally interesting example of the *imperator* Mastiès, who, in the second half of the fifth century governed the kingdom of Aurès before the latter was taken over by Iabdas (Iaudas) at the start of the Byzantine occupation.[10] In his posthumous proclamation Mastiès declared: 'I never violated an oath I made, nor did I break my faith either with the Romans or with the Moors.'

Lastly, we might mention the case of Antalas who, although a mutineer, was not loath to revive memories of past service in the Byzantine army: 'You speak in a contrived manner of your friendship for me. Was I not also your friend? Did I not go to war under your command? And did I not, Romans, fight for your generals?'[11]

It was with these experienced chiefs, who headed powerful confederations of tribes, that the Byzantine authorities signed agreements guaranteeing good neighbourliness. Relations between the tribes and the imperial power were governed by fairly precise conventions. First there were negotiations, after which these treaties of alliance were signed. They spelled out precise obligations on both sides. For instance, between the Byzantines and the tribe of the Astrices, the Berbers pledged themselves to remain peaceful and to live quietly under the protectorate of the emperor.

Byzantium, for its part, gave the deputies many presents and awarded the insignia of suzerainty to the Berber king. In return for his fidelity and loyalty, the vassal was granted a place in the hierarchy of Byzantine dignitaries. He could command a detachment of regular troops and bear the title of *magister militum* or that of patrician. He was to take command of the African contingents that were raised in his region to serve in the imperial army. He was entitled to a guard of Greek soldiers. In addition, the emperor undertook to pay these chiefs an annual subsidy, the *annona*, the amount of which was formally determined. The African prinee pledged, in return, to render military services. He became the guarantor of peace on his territory. He was to be responsible for maintaining order and tranquillity throughout his district.

The Byzantines interpreted this type of treaty as giving them the right to intervene in all aspects of the lives of the tribes and their chiefs. The tribes were kept in a state of total subjection, and the Byzantine authorities interfered more and more in their internal affairs. They took it upon themselves to regulate trade links between these tribes and others, and with the outside world. They determined the portion of land to be farmed by the tribes living in well-defined areas.

Religious development

Religious links served to complete the system inaugurated by Justinian. He declared himself 'desirous of ensuring not only the safety of the body, but also the salvation of the soul'.[12]

But Christianity had given ground to paganism. In the sixth century, the oasis of Awdjila was the most famous prophetic centre in the whole of North Africa. The Levathes worshipped the god Gurzi, whose high priest was King Ierna. He was a warrior deity to whom blood sacrifices were made. Pagan tribes were also to be found in Byzacena, and Justinian sought to fight the pagans in the same way as he fought the Arians, the Donatists and the Jews. Moreover, his policy was one of assimilating subject peoples. He strove to spread Christianity among the vassal tribes.

In Africa this policy very soon bore fruit. Christianity very rapidly progressed beyond the *limes* to take root in the Saharan oases. And in the oasis of Awdjīla, even if the cult of Ammon was not completely abandoned, it now existed alongside a Christian chapel. The good relations which the Byzantine authorities maintained with the Garamantes were coupled with the introduction of Christianity. Consequently, in +569, the Garamantes in the Fezzān embraced Christianity after concluding a treaty with the empire. Another example is that of the tribe of the Maccuritae, of the Massif de l'Ouarsenis, who

also embraced Christianity. In the seventh century the tribes in the Sabrâta region finally abandoned paganism to become Christians.

Conclusion

The success of Christianity should not make us lose sight of Byzantium's many failures in the African countries. Its ambition was to be the heir to Rome, but it was never able to recover all the territory of the Roman emperors in Libya. It claimed to be the vehicle of Roman culture, but the latter left only superficial traces. Its clumsy policy towards the tribes met with nothing but hostility and determined resistance. Its political control also endured many vicissitudes, while its territory was gradually shrinking by the beginning of the seventh century. The Byzantines lived in a state of constant alert in the rest of the country. They hurriedly built massive ramparts, thus giving the impression of conquerors beleaguered in their conquests. In my opinion, their presence had only one beneficial aspect: it brought about the integration of the African élites with the general population, with the result that a sense of nationhood was created. Otherwise, the Byzantine rulers, faced with the uprisings of tribes both inside and outside the *limes*, undermined from within by the veiled hostility of a dispossessed people and the insurrection of heretics, fell easy prey to the Arab forces which attacked them in +647.

Notes

1. E. F. Gautier, *Le passé de l'Afrique du Nord*, Paris, Payot, 1952, p. 24, author's italics.
2. Ibid., p. 25, author's italics.
3. To quote J. Vignet-Zung.
4. G. Camps, *Berbères. Aux marges de l'histoire*, Toulouse, Éditions Hesperides, 1981.
5. C. Courtois, *Les Vandales et l'Afrique*, p. 112, Paris, AMG, 1955.
6. Corippus, *La Johannide (Iohannis)*, Book III, pp. 27ff. (trans. by J. Alix in *Revue Tunisienne*, Vol. VI, 1899, p. 453).
7. Procopus, *De Bello Vandalico*, p. 423 (quoted by C. Diehl, *L'Afrique byzantine*, pp. 400–1, Paris, Leroux, 1896).
8. Procopus, *Historia Arcana*, pp. 106–7 (quoted by Diehl, op. cit., pp. 382–3).
9. Corippus, op. cit., p. 149.
10. Cf. M. Fantar and F. Decret, *L'Afrique du Nord dans l'Antiquité*, p. 344, Paris, Payot, 1981.
11. Cf. 'La Johannide', *Revue Tunisienne*, Vol. VII, 1900, p. 114.
12. Cf. Diehl, op. cit., p. 333.

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Summary record of the proceedings of the symposium

The symposium was attended by the following experts: Professors M. K. Abdelalim (Egypt), P. Behrens (Federal Republic of Germany), K. Bollo-Bi (Ivory Coast), F. Chamoux (France), Mrs M. Cornevin (France), A. H. El-Mosallamy (Egypt), F. El-Rashdy (Libyan Arab Jamahiriya), B. Gado (Niger), J. A. Ilevbare (Nigeria), D. Lange (Federal Republic of Germany), A. Laronde (France), F. Mori (Italy) and J. P. Roset (France).

The following experts were invited but regretted they were unable to attend: Professors A. H. Ghazal (Egypt) and Y. K. Poplinskiy (USSR).

The following did not reply: Professors C. M. Daniels (United Kingdom), R. El-Athram (Libyan Arab Jamahiriya), M. El-Kawwash (Libyan Arab Jamahiriya), M. T. Jerary (Libyan Arab Jamahiriya), T. Sulaiman (Libyan Arab Jamahiriya) and B. A. Warmington (United Kingdom).

The following members of the International Scientific Committee also took part in the discussions: Professors J. Devisse (France, Rapporteur of the Bureau), Cheikh Anta Diop (Senegal), M. El Fasi (Morocco, editor of Volume III), I. S. El-Hareir (Libyan Arab Jamahiriya), I. Hrbek (Czechoslovakia, co-editor of Volume III), D. Laya (Niger, Vice-president of the Bureau), G. Mokhtar (Egypt, editor of Volume II) and J. Vansina (Belgium, Vice-president of the Bureau).

The Secretariat of Unesco was represented by: Mr A. Arfwedson, representative of the Director-General, Mr A. Bakkalcioglu, Mr M. Glélé, Mr I. K. Katoke and Mrs M. F. Lengué.

The symposium was opened by Mr Arfwedson on 16 January at 10 a.m. A bureau was appointed to direct the work and it was composed as follows: Chairman: Dr G. Mokhtar; Vice-Chairmen: Dr I. S. El-Hareir and Professor D. Laya; Rapporteur: Professor J. Devisse.

Summary of the work of the symposium

Theme No. 1: Environmental stability or change prior to the Arab conquest; irrigation systems and economic activity

The papers by Professors A. Laronde and R. El-Athram provided the starting-point for the discussions.

The Libyan economy in an African context, from the first to the seventh century

1. Research in southern Tripolitania, carried out in part with the assistance of Unesco, has helped to throw new light on production situations. For centuries, the drying up of the Sahara does not seem to have had a particularly harmful effect on environmental conditions. The northern part of Libya is situated in the 200/400 mm annual rainfall bracket, which means that agriculture is possible but to a greater or lesser extent precarious.

   Prior to the Roman occupation, major hydraulic works had been carried out in the valleys: wells, soil-retention embankments and slope development have been uncovered by archaeologists. Agricultural production probably improved as a result, particularly from the first to the third centuries. Nevertheless: cereal production was never sufficient to feed an expanding and potentially dense population. Fifty hectares yielded enough grain for only fifty people. Cereal production was never adequate, for example, to meet the needs of the occupying Roman army.

   It was therefore necessary to bring in additional food supplies. These were provided by livestock-breeding, which was to a certain extent nomadic, fishing on the coast and arboriculture. In each case, the type of production was adapted to the nature of the environment. This very varied form of production was in keeping with the seasonal movements of the producers.

   During the Roman period, a significant change occurred in the ownership of land in the north, as large agricultural domains were taken over by Romanized proprietors. The new modes of production that resulted may have disturbed the relationship with the environment. They may have encouraged the adoption of a too settled way of life unsuited to the long-established system of complementary production areas.

   Studies similar to those carried out in southern Tripolitania should be undertaken elsewhere, particularly in Cyrenaica and the oases. The idea—which has never been developed nor even explicitly advanced—that over-intensive Roman farming methods destroyed the age-old balance

between agricultural activities relying on the system of complementary areas and water and a fragile environment was a constant underlying theme in the questions posed. Changes in the fauna resulting from excessive culling—consequent, for example, on the demand for big cats by the Roman circuses—are obvious.

2. Two observations were made concerning the dromedary and the horse. Current knowledge suggests that the former did not figure prominently until after the third century. It was, however, pointed out that certain recent works provide grounds for thinking that it may have been introduced into Libya much earlier from the central Nile valley. Naturally, the main focus of attention continues to be the role played by the dromedary after the second century in altering the conditions governing the crossing of the Sahara.

   Horses were very numerous in Cyrenaica and Tripolitania over many centuries and probably up to very recent times. Dromedaries did not replace them. So, the movement of horses southwards also deserves to be studied, together with evidence for the presence of horses to the south of the Sahara.

3. Thanks to written sources, more is known about Libyan trade along the Mediterranean seaboard than in the south. It was felt that it would be interesting to explore the hypothesis of the imports of copper, produced in the Aïr region of the Niger since at least the first millennium before our era. The copper and bronze artefacts of Cyrenaica, renowned for their quality, are well known; the source of the metal used is not.

   More generally, the part played by the oases of the hinterland in inter-African trade deserves closer study by researchers.

Silphium

This plant, so renowned among the Greeks and Romans and exported in such quantities from Cyrenaica, seems to have completely disappeared. It was perhaps *over-exploited.*

1. As a result of the recent diseovery of a large number of terracotta statues representing the goddess Artemis holding a silphium plant in her hand, the height of this plant can now be put at between 30 and 40 cm. It can no longer be confused, therefore, with a number of other plants still known to this day for their medicinal properties. Botanical research is to be instituted in the regions of Cyrenaica where it used to be picked.
2. This plant was not exported directly. Its sap was mixed with very pure flour. The product, which kept well, was exported in pots.
3. The variations in the ways it was exported are still little known. Originally the subject of a royal monopoly, it probably came to be sold in a more or less clandestine and uncontrolled fashion with the growth in demand.

The topic remains to be studied by historians of the economy of the ancient world.

4. The causes of its disappearance remain unknown. Did the plant disappear as a result of the exhaustion of the species? Or, as some evidence suggests, was it replaced in consumer markets by another, less expensive plant, fulfilling virtually the same function?

Theme No. 2: The peopling of ancient Libya, with special emphasis on Libyans and foreign suzerainty before the Arab conquest

It should be pointed out that authors prior to the Arab period used the word 'Libya' to designate a group of territories much more extensive than the modern state which has preserved the name. This name often referred to a large part of the African continent, as perceived at the time. This fact must be borne in mind in order to understand the discussion that arose from the papers contributed by Messrs Abdelalim, Behrens, Diop, El Fasi, El-Mosallamy, El-Rashdy, Mori, Roset and Warmington.

The emergence of the 'Berber branch'

1. Theses on this point remain extremely divergent. Research is far from having arrived at a solution that commands broad agreement.

   One thesis, based on linguistics and archaeology, maintains that the Berbers—Temehu—came from Nubia, where they are said to have settled when the Sahara dried up and from where they reached the north.

   Another thesis points to the appellation—Tehenu—given to them by the Egyptians as early as —3500 and their constant association with the life of pharaonic Egypt.

   A third thesis sees the Libyans as the descendants of the peoples of the sea. They were in contact with the Egyptians virtually since the time of the Old Kingdom. From their bases to the west of the Nile delta, they launched violent and sustained attacks on the pharaonic world after —1230. They finally settled on the western flank of Egypt.

   A fourth thesis, drawing on genealogies quoted by Arab authors, argues the Libyans' connection with the age of King David, *c.* —1000, and with the Yemen.

   The discussion was only partly successful in reconciling points of view which were initially very divergent. These postulate:

   (a) The Mediterranean and Indo-European origin of groups that gradually merged linguistically, culturally and physically in the centuries following their arrival with the mass of the African populations. The possibility cannot be ruled out that members of

these groups may have spread as far as Nubia by the time of the Old Kingdom, prior even to their massive attacks on the delta.

(b) The Saharan, and subsequently Nubian, origin (the opposite path to that suggested above) of peoples practising stock-breeding and having significant linguistic similarities with other Afro-Asian stock-breeders. A distant variant of this hypothesis maintains that the 'Libyans' were driven northwards out of Egypt and ventured into other areas of the Mediterranean.

(c) The eastern origin of groups speaking a Semitic language close to Arabic.

With regard to the latter hypothesis, several participants pointed out that, following their conversion to Islam, many African peoples had claimed more or less mythical Arab origins. There was a call for caution in examining accounts of origins.

The only point of (tacit) agreement was the rejection of the idea that the Libyans, assimilated to the Tehenu, could have been constantly associated with the life of the Egyptians, since the latter consistently regarded and represented the Libyans as different from themselves.

Leaving aside proven historical events, which, as the discussion showed, are not all easy to square with the hypotheses advanced (representing one more obstacle to the adoption of certain of these hypotheses), it emerged clearly that research, once again, can only resolve the matter after detailed studies of comparative linguistics. And, here again, the divergences are real. Is 'Berber' a creole-type language? Did it arise in Africa from a mingling of foreign elements with African substrata? Is it a common language of livestock herders, widespread in Asia and Africa? Is it a language akin to Arabic?

The symposium endorsed the methodological conclusions of the Cairo symposium on 'The peopling of Ancient Egypt and the Deciphering of the Meroitic Script' (1974), without going beyond them, and it will probably be recommended that serious studies of linguistics and toponymy be carried out.

A new line of research was however proposed; namely study of the metals used by the Libyans to manufacture their weapons, which the sources always describe as being in abundant supply. It would be worth while carrying out laboratory research on gold and copper to determine the origin of the metals in question.

2. Another—*archaeological*—approach was proposed by the authors of three papers.

One of them is based on the broadest possible comparative study of the forms of inhumation, gravestones and funerary monuments of the Garamantes. The author attempts to determine the geographical area

occupied by this people, the duration of these burial customs and, if possible, their chronology. He also suggests comparing the tombs of the Garamantes with those of other regions of the Sahara, those of North Africa and those of the Nile (particularly Meroe). The author advances his hypothesis with great circumspection. His method fits into the general pattern of research currently being pursued by practically all the prehistorians specializing in the Sahara, which has not yet arrived at incontrovertible conclusions. It was suggested to the author that the comparison might subsequently be extended to Syria or southern Arabia.

Excavations conducted on a site in the Aïr region of the Niger gave rise to some precise and important conclusions. The site in question consists of an inhabited area of 3–4 ha, a huge necropolis and numerous rock carvings, apparently contemporaneous. The population which settled on this site in the eighth or seventh century before our era produced pottery of very fine quality and possessed weapons made of copper—the metal having a high arsenic content. It would not be going too far to identify them as a group of 'proto-Berbers': Aïr was subsequently to receive many other Berbers, and the archaeological evidence clearly points to a cultural kinship between the latter and their predecessors, just as it highlights the break with neolithic cultures in the same region.

The significance of this site, finally, is that it provides, for the first time, material evidence of a culture that can be linked to the age of the chariots. Of course, these excavations have not supplied the specific new information about the chariots that was the goal of speculation in this area.

Both biological and philosophical in its approach, the study devoted to rock pictures in the northern part of the Sahara refers us back to the earliest times. The author points out that the Apollo grotto in Namibia has been dated with certainty at between —25,550 and —23,550. It is therefore not unreasonable to think that the situation may be similar in northern Africa and that the oldest surviving works should be ascribed to the Pleistocene and not, as is too frequently the case, to the Holocene. The works concerned attest to the fact that their authors had already experienced significant cultural and artistic development. They should not be isolated, within the fertile Sahara known to them, from all the adjacent regions.

During the discussion, it was emphasized that examples of iconographic convergence, similar to those which may be observed between the Apollo grotto in Namibia and the Grotte des Trois Frères in Ariège, should be treated with caution at the present juncture in view of the difficulty in interpreting them.

The discussion veered momentarily towards the question of the

dates of the appearance of iron technology. Datings prior or close to —1000 are emerging in the northern tropical zone. This will make it necessary to re-examine the whole question of the origins of iron technology. Early dates are also coming to light in more northerly latitudes: iron has been found in an eighth-century tomb at Iwelen, in Aïr.

Similarly, pottery production of very early date—put at between —7550 and —7050—is acknowledged in the Sahara and Aïr. Finally, copper was present in the third millennium in Aïr (where the copper used was probably local), in metallurgical form in Nubia (Kerma region) around —2000 and in Aïr and in Mauretania in the first millennium.

Theme No. 3: The axes of communication: north-south, from the coast to Chad, via the Kawār; east-west, from Kufra to Gao—The ancient Libyans, their contacts with the Greeks, the Romans and the Byzantines

1. The Libyans helped the Greeks to organize their coastal colonies and marriages were concluded between the immigrants from Thera and Libyan women with the encouragement of the law. But the Greeks were less circumspect than the Phoenicians in their dealings with the Libyans: they interfered in the lives of their hosts and subjected them to constant pressure. This pressure increased with the Roman occupation, which was marked by efforts to push further south. The Libyans were driven from their lands. They continued to resist this policy and their resistance, which needs to be studied in all its complexity, was accompanied by migratory movements of entire groups both west to east and east to west.
2. There was a two-way exchange of cultural traditions between the Libyans and the Greek or Roman occupiers. Cyrenaean onomastics has shown this to be so. The example of the interchanges between the cults of Zeus and Ammon was explored.

The theme of Mediterranean contacts, immeasurably better understood than most of the topics studied at the symposium, deserves examination and from a new standpoint. However, to neglect this theme is less serious than to overlook the whole range of themes relating to the specifically African aspects of the life of the Libyan peoples.

Theme No. 4: Potential contact between the central valley of the Nile and the River Niger area

Discussion was based on the papers contributed by Messrs Gado and Ilevbare.

1. There is today a certainty, supported by many recent archaeological discoveries, that exchanges took place along the axis of the Nile. Beyond

that, the hypothesis that there was also contact between the Nile and much more southerly areas of the continent was examined yet again, without it proving possible to arrive at any definite conclusions.

The hypothesis that 'transversal' links existed between the Red Sea and the Atlantic in the savannah belt is intrinsically reasonable. There is no lack of facts to support this idea, so long as it is recognized that the traffic in question consisted of a series of discrete stages rather than unbroken, sea-to-sea exchanges. There is as yet no certainty that regular exchanges took place from one coast to the other prior to the arrival of the Arabs.

There is plenty of evidence, however, to indicate the exchange of techniques and certain products, on a step-by-step basis at least, and this should be studied more closely. Copper and pottery would appear to be a reliable and important source of evidence in this respect. The movement of objects remains difficult to prove, in spite of some interesting discoveries such as a 'statue' of antique appearance discovered in Niger.

An interesting discussion on this statue gave rise to the hypothesis that it might have come from Cyrenaica, might date from the Roman period—as laboratory analyses had previously suggested—and might be related to the representations of Artemis, which were mentioned in connection with the silphium plant. A study of this object is to be published simultaneously in Niger and France.

2. Study of the cultural links between the valley of the Nile and the valley of the Niger—a still more difficult and more ambitious enterprise—relies on analyses in the areas of political sociology, linguistics and accounts of origins—examples of which were provided by one paper. The discussion pointed up the value of the method, but also the difficulty of the undertaking and the need for joint inquiry in this field.

The debate strongly underlined the need for caution in these as yet little-known fields.

Where exchanges of all kinds in Africa are concerned, scholars have for too long been prone to think in a north–south direction. Only today are people beginning occasionally to think in a south–north direction (valley of the Nile). It is interesting to note that initial attempts to explore the hypothesis of east–west exchanges have not ended in failure but have led to the formulation of interesting working hypotheses.

Theme No. 5: Social situation from the end of the Byzantine period up to the eve of the Arab conquest

Recent research has shown that active trade very probably existed between the basin of Lake Chad and the Mediterranean and between the Chad and the

Nile before the arrival of the Arabs, in particular during the period covered by the symposium. The existence of regular economic links appears to be confirmed and the trade routes seem fairly well known. But careful elucidation of the development of the overall situation is still required, particularly with reference to the Byzantine period. Two key themes where this period is concerned are the probable intensification of the economic exploitation of Africa in its various forms and the tensions created by the introduction of Christianity.

More soundly based research should also be resumed on the society unsatisfactorily termed that of the 'Sao' and on the links between Chad and the Nile via Dārfūr.

Conclusion

The period that was the main focus of discussion at this symposium continues, then, to offer scholars many subjects for research. Studies of the economic, human and cultural links between the northern regions of the continent and the Chad basin and between the valleys of the Nile and the Niger constitute vital priorities for a better knowledge of the Africa's past.

Appendix: Guidance note

At its Extraordinary Plenary Session held in Paris on 30–31 July 1979, the International Scientific Committee for the Drafting of a General History of Africa, while reviewing the final stages of the preparation of the first edition of Volume II, felt that there was a need for additional scientific information which would contribute to the correction and improvement on the shortcomings in this Volume (II) and should provide material for use in Volume III (which is still being prepared).

Having recommended that a note be inserted at the end of Chapter 18 of Volume II (see p. 463) saying that it was 'intended to give a more detailed account of the legacy and role of Libya during the period covered in this volume in the next edition', the committee went on to propose a symposium to discuss the problem. Consequently, it was suggested that the symposium should examine the contribution of 'Libya in classical Antiquity, with particular reference to the role of Cyrenaica during the Greek era, Libya during the Phoenician period and the civilization of the Garamantes'. It further suggested that the research findings could be published in a volume of the series 'The General History of Africa: Studies and Documents', pending full incorporation in a second edition of the work.

This proposal was further classified by the committee at its fifth Plenary Session held at Ibadan, Nigeria, from 20 to 31 July 1981, when it recommended that Dr El-Hareir be asked to submit to the Bureau, for examination, a draft programme for this symposium consisting of: (a) agenda; (b) topics requiring preliminary studies; (c) names of specialists to be invited where appropriate.

At its thirteenth meeting (Paris, 12–22 July 1982) the Bureau, taking into consideration the proposals put forward by Dr El-Hareir and those of its own 'working group', decided on the following title and themes for the symposium. Title: 'Libya Antiqua: a study on the Fezzān and relations between the Mediterranean, the Chad basin and the Nile valley between the first and seventh centuries'.

Suggested themes

1. Environmental stability or change prior to the Arab conquest; irrigation systems and economic activity.
2. Peopling:
   (a) Formation of the Berber branch.
   (b) Social structure of Cyrenaica; state of the question.
   (c) The Garamantes. Current progress and planned research.
3. The axes of communication:
   (a) North–south, from the coast to Chad, via the Kawār.
   (b) East–west, from Kufra to Gao.
4. Prehistoric art, from the Mediterranean to Chad.

5. Potential contact between the central valley of the Nile and the River Niger area.
6. Social situation from the end of the Byzantine period up to the eve of the Arab conquest.

Following the decision of the Bureau, twenty-one studies were commissioned to be prepared by specialists drawn from a list proposed by the committee, Dr El-Hareir and other institutions and individuals contacted. These studies are grouped as follows:

1. *Environmental change or stability prior to the Arab conquest; irrigation systems and economic activity*
   (a) The silphium plant in Cyrenaica.
   (b) The Roman agricultural development of Libya and its impact on Libyan Roman economy.

2. *The peopling of ancient Libya, with special emphasis on Libyans and foreign suzerainty before the Arab conquest*
   (a) The formation of the Berber branch.
   (b) The Garamantes and the contacts across the Sahara.
   (c) The Berber migrations to North Africa.
   (d) The origin of the Garamantes; their relation to their neighbours through their burial customs and how they were influenced by them; their commercial activities with special emphasis on: imports to the Garamantes; the role they played as middlemen.
   (e) The social structures of Cyrenaica.
   (f) The actual state of the Garamantes problem in general, with the prospectives of the future trends of research.
   (g) The Semitic migrations to Libya and North Africa.

3. *The axes of communication: north–south, from the coast to Chad, via the Kawār; east–west, from Kufra to Gao*
   (a) The languages of eastern Sudan and the Meroitic script.
   (b) Race relations since the early period of the Hellenistic era.
   (c) The caravan and communication routes during the Roman period.

4. *The prehistoric art from the Mediterranean to Chad*
   (a) Drawings in the Fezzān.
   (b) The prehistoric art from the Mediterranean to Chad.
   (c) Rock paintings and drawings in the Libyan desert.

5. *Potential contact between the central valley of the Nile and the River Niger area*
   (a) Contacts between the central valley of the Nile and the River Niger area.
   (b) Contacts between the central valley of the Nile and the River Niger area in ancient Libya.

6. *Social situation from the end of the Byzantine period up to the eve of the Arab conquest*

Only four studies have been received at the time this note is being prepared. These are:

1. 'Libyco-Berber relations with ancient Egypt: the Tehenu in the Egyptian records' (by Dr A. H. S. El-Mosallamy).
2. 'Iwelen, an archaeological site of the chariot period in the northern Aïr region, Niger' (by Professor J. P. Roset).
3. 'Social situation in the Lake Chad region at the end of the Byzantine period, prior to the introduction of Islam' (by Professor D. Lange).
4. 'Potential contacts between the central valley of the Nile and the River Niger area in ancient Libya in the first seven centuries of the Christian era' (by Professor J. A. Ilevbare).

Bearing in mind the objectives of the symposium as laid out by the committee the experts are invited to discuss the studies and recommend concrete scientific information which: (a) should be incorporated in the relevant chapters of Volume II when time comes to issue a revised edition; (b) are useful for Volume III (this volume covers the period from the seventh to the eleventh century); (c) are related to research activities, in particular as regards the peopling of ancient Libya—ongoing projects as well as planned research activities.

Please note that in the case of the themes where no papers have been received from contributors commissioned by Unesco, experts who are specialists in those areas and are attending the symposium are requested to present oral or written materials concerning the area of their specialization in order to fill this gap.

In order to achieve these goals the following agenda is proposed:

1. Opening of the Colloquium.
2. Election of the Bureau.
3. Presentation of papers and discussion on the following themes:
   (a) Environmental stability or change prior to the Arab conquest; irrigation systems and economic activity.
   (b) Peopling: formation of the Berber branch; social structure of Cyrenaica; state of the question; the Garamantes: current progress and planned research.
   (c) The axes of communication: north–south, from the coast to Chad, via the Kawār; east–west, from Kufra to Gao.
   (d) Prehistoric art, from the Mediterranean to Chad.
   (e) Potential contacts between the central valley of the Nile and the River Niger area.
   (f) Social situation from the end of the Byzantine period up to the eve of the Arab conquest.
4. Final report and conclusions.
5. Closing.

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Cover photo:

Hunt scene with giraffe and chariot. Rock carving at Iwelen, northern Aïr, Niger

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